

# **ATS 900**

Release 22.100 - Oct 2016

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**ADDED FUNCTIONS**

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[Spider \[939\] - Spider 2.0 JTDM](#)

ALFA ROMEO				159 [939] Berlina - 159 1.9 JTS	
Year	Engine	Liters	HP	System	Functions
2005/06 - 2008/12	939 A6.000	1.9	160	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO				159 [939] Berlina - 159 2.2 JTS	
Year	Engine	Liters	HP	System	Functions
2005/06 - 2008/12	939 A5.000	2.2	185	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2011/01 -	939 A5.000	2.2	185	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO				159 [939] Berlina - 159 1.9 JTDM 8V	
Year	Engine	Liters	HP	System	Functions
2005/06 - 2008/12	939 A1.000	1.9	120	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2006/01 - 2008/12	937 A7.000	1.9	115	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>



ALFA ROMEO		159 [939] Berlina - 159 1.9 JTDM 16V			
Year	Engine	Liters	HP	System	Functions
2005/06 - 2008/12	939 A2.000	1.9	150	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2006/01 - 2008/12	937 A8.000	1.9	136	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO		159 [939] Berlina - 159 2.4 JTDM			
Year	Engine	Liters	HP	System	Functions
2005/06 - 2008/12	939 A3.000	2.4	200	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO		159 [939] Berlina - 159 3.2 JTS Q4			
Year	Engine	Liters	HP	System	Functions
2006/01 - 2008/12	939 A.000	3.2	260 - 265	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2011/01 -	939 A.000	3.2	260	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> </ul> </li> </ul>

- System

ALFA ROMEO						159 [939] Berlina - 159 1.8i	
Year	Engine	Liters	HP	System	Functions		
2006/03 - 2011/11	939 A4.000	1.8	140	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"><li>• Identification</li><li>• Clear errors</li><li>• Error memory</li><li>• Current values<ul style="list-style-type: none"><li>- Power supply</li><li>- Driving speed</li><li>- The ambient temperature</li><li>- Reverse gear</li><li>- Trailer operation</li><li>- System</li></ul></li></ul>		

ALFA ROMEO						159 [939] Berlina - 159 2.4 JTD Q4	
Year	Engine	Liters	HP	System	Functions		
2006/09 - 2008/12	939 A9.000	2.4	209	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"><li>• Identification</li><li>• Clear errors</li><li>• Error memory</li><li>• Current values<ul style="list-style-type: none"><li>- Power supply</li><li>- Driving speed</li><li>- The ambient temperature</li><li>- Reverse gear</li><li>- Trailer operation</li><li>- System</li></ul></li></ul>		

ALFA ROMEO						159 [939] Berlina - 159 2.4 JTD	
Year	Engine	Liters	HP	System	Functions		
2007/02 - 2008/12	939 A9.000	2.4	209	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"><li>• Identification</li><li>• Clear errors</li><li>• Error memory</li><li>• Current values<ul style="list-style-type: none"><li>- Power supply</li><li>- Driving speed</li><li>- The ambient temperature</li><li>- Reverse gear</li><li>- Trailer operation</li><li>- System</li></ul></li></ul>		

ALFA ROMEO						159 [939] Berlina - 159 3.2 JTS	
Year	Engine	Liters	HP	System	Functions		
2007/08 - 2008/12	939 A.000	3.2	265	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"><li>• Identification</li><li>• Clear errors</li><li>• Error memory</li><li>• Current values<ul style="list-style-type: none"><li>- Power supply</li><li>- Driving speed</li><li>- The ambient temperature</li><li>- Reverse gear</li><li>- Trailer operation</li><li>- System</li></ul></li></ul>		

ALFA ROMEO		159 [939] Berlina - 159 1.8 TBI			
Year	Engine	Liters	HP	System	Functions
2009/05 - 2011/11	939 B1.000	1.8	200	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO		159 [939] Berlina - 159 2.0 JTDM			
Year	Engine	Liters	HP	System	Functions
2009/05 - 2010/12	939 B3.000	2.0	170	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2010/06 -	939 B4.000	2.0	136	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2009/05 -	844 A2.000	2.0	163	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO		159 [939] Sportwagon - 159 1.9 JTS Sportwagon			
Year	Engine	Liters	HP	System	Functions
2006/03 - 2008/12	939 A6.000	1.9	160	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO 159 [939] Sportwagon - 159 1.9 JTDM Sportwagon					
Year	Engine	Liters	HP	System	Functions
2006/03 - 2008/12	939 A1.000	1.9	120	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO 159 [939] Sportwagon - 159 2.2 JTS Sportwagon					
Year	Engine	Liters	HP	System	Functions
2006/03 - 2008/12	939 A5.000	2.2	185	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO 159 [939] Sportwagon - 159 3.2 JTS Sportwagon Q4					
Year	Engine	Liters	HP	System	Functions
2006/03 - 2008/12	939 A.000	3.2	260 - 265	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO 159 [939] Sportwagon - 159 2.4 JTDM Sportwagon					
Year	Engine	Liters	HP	System	Functions
2006/03 - 2008/12	939 A3.000	2.4	200	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO 159 [939] Sportwagon - 159 1.8i Sportwagon					
Year	Engine	Liters	HP	System	Functions

Year	Engine	Liters	HP	System	Functions
2006/03 - 2008/12	939 A4.000	1.8	140	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO 159 [939] Sportwagon - 159 2.4 JTD Sportwagon Q4					
Year	Engine	Liters	HP	System	Functions
2006/09 - 2008/12	939 A9.000	2.4	209	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO 159 [939] Sportwagon - 159 2.4 JTD Sportwagon					
Year	Engine	Liters	HP	System	Functions
2007/02 - 2008/12	939 A9.000	2.4	209	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO 159 [939] Sportwagon - 159 3.2 JTS Sportwagon					
Year	Engine	Liters	HP	System	Functions
2007/08 - 2008/12	939 A.000	3.2	265	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO 159 [939] Sportwagon - 159 1.8 TBi Sportwagon					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> </ul>

2009/05 - 2010/12	939 B1.000	1.8	200	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
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ALFA ROMEO 159 [939] Sportwagon - 159 2.0 JTDM Sportwagon					
Year	Engine	Liters	HP	System	Functions
2009/05 - 2010/12	939 B3.000	2.0	170	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2010/06 -	939 B4.000	2.0	136	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2009/05 -	844 A2.000	2.0	163	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO Brera [939] - Brera 2.2 JTS					
Year	Engine	Liters	HP	System	Functions
2006/01 - 2010/12	939 A5.000	2.2	185	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO Brera [939] - Brera 3.2 JTS 24V Q4					
Year	Engine	Liters	HP	System	Functions

2006/01 - 2010/12	939 A.000	3.2	260	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
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ALFA ROMEO						Brera [939] - Brera 2.4 JTDM 20V					
Year	Engine	Liters	HP	System		Functions					
2006/04 - 2010/12	939 A3.000	2.4	200	Parking assisting system Park Distance Control 2.0		<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>					
2007/05 - 2010/12	939 A9.000	2.4	209	Parking assisting system Park Distance Control 2.0		<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>					

ALFA ROMEO						Brera [939] - Brera 3.2 JTS 24V					
Year	Engine	Liters	HP	System		Functions					
2008/03 - 2010/12	939 A.000	3.2	265	Parking assisting system Park Distance Control 2.0		<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>					
2007/01 - 2008/02	939 A.000	3.2	260	Parking assisting system Park Distance Control 2.0		<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>					

ALFA ROMEO						Brera [939] - Brera 1.8 TBi					
Year	Engine	Liters	HP	System		Functions					

Year	Engine	Liters	HP	System	Functions
2009/05 - 2010/12	939 B1.000	1.8	200	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO					
Brera [939] - Brera 2.0 JTDM					
Year	Engine	Liters	HP	System	Functions
2009/05 - 2010/12	939 B3.000	2.0	170	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2009/02 - 2010/12	844 A2.000	2.0	163	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO					
MiTo [955] - MiTo 1.4 LPG					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Coolant temperature</li> <li>- Engine revolution</li> <li>- emergency switch off</li> <li>- electric fuel pump</li> <li>- Engine status</li> <li>- Control unit, internal relay</li> <li>- Injection time, cylinder 1</li> <li>- Injection time, cylinder 2</li> <li>- Injection time, cylinder 3</li> <li>- Injection time, cylinder 4</li> <li>- Fuel feeding stop</li> <li>- LPG operation</li> <li>- Petrol operation</li> <li>- Liquefied petroleum gas level warning lamp</li> <li>- Liquefied petroleum gas switch</li> <li>- Gas tank level</li> </ul> </li> </ul>



2011/07 -	198 A4.000	1.4	120	Engine control Landi Renzo LC02	<ul style="list-style-type: none"> <li>- Operating time</li> <li>- Gas switching waiting time</li> <li>- Gas shut-off valve current input</li> <li>- Control unit temperature</li> <li>- Dry-running operation function</li> <li>- Fuel mode requested</li> <li>- Fuel mode</li> <li>- Current at the fuel pump</li> <li>- Gas rail temperature</li> <li>- Gas rail pressure</li> <li>- Gas shut-off valve</li> <li>- Injection time/cylinder 1</li> <li>- Injection time/cylinder 2</li> <li>- Injection time/cylinder 3</li> <li>- Injection time/cylinder 4</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- emergency switch off</li> <li>- electrical fuel pump relay</li> <li>- Liquefied petroleum gas indicator lamp</li> <li>- Injection valve Cylinder 1</li> <li>- Injection valve Cylinder 2</li> <li>- Injection valve Cylinder 3</li> <li>- Injection valve Cylinder 4</li> <li>- Gas shut-off valve</li> <li>- Operating mode indicator lamp</li> </ul> </li> </ul>
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ALFA ROMEO		Spider [939] - Spider 2.2 JTS			
Year	Engine	Liters	HP	System	Functions
2006/03 - 2010/12	939 A5.000	2.2	185	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO		Spider [939] - Spider 3.2 JTS 24V Q4			
Year	Engine	Liters	HP	System	Functions
2006/09 - 2010/12	939 A.000	3.2	260	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO		Spider [939] - Spider 2.4 JTDM 20V			
Year	Engine	Liters	HP	System	Functions
2007/03				Parking assisting system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>

- 2010/12	939 A3.000	2.4	200	Park Distance Control 2.0	<ul style="list-style-type: none"> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul>
2008/03 - 2010/12	939 A9.000	2.4	209	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO					
Spider [939] - Spider 3.2 JTS 24V					
Year	Engine	Liters	HP	System	Functions
2008/03 - 2010/12	939 A.000	3.2	260	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO					
Spider [939] - Spider 1.8 TBi					
Year	Engine	Liters	HP	System	Functions
2009/05 - 2010/12	939 B1.000	1.8	200	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

ALFA ROMEO					
Spider [939] - Spider 2.0 JTDM					
Year	Engine	Liters	HP	System	Functions
2009/05 - 2010/12	939 B3.000	2.0	170	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

2009/04 - 2010/12	844 A2.000	2.0	163	Parking assisting system Park Distance Control 2.0	<b>• Current values</b> <ul style="list-style-type: none"><li>- Power supply</li><li>- Driving speed</li><li>- The ambient temperature</li><li>- Reverse gear</li><li>- Trailer operation</li><li>- System</li></ul>
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[A3 \[8PA\] Sportback - A3 1.4 TFSI Sportback](#)  
[A3 \[8V1\] - A3 1.4 TFSI](#)  
[A3 \[8V1\] - A3 1.8 FSI](#)  
[A3 \[8V1\] - A3 2.0 TDI](#)  
[A3 \[8V1\] - A3 1.6 TDI](#)  
[A3 \[8V1\] - A3 1.8 FSI quattro](#)  
[A3 \[8V1\] - A3 2.0 TDI quattro](#)  
[A3 \[8V1\] - A3 1.2 TFSI](#)  
[A3 \[8VA\] Sportback - A3 1.4 TFSI Sportback](#)  
[A3 \[8VA\] Sportback - A3 2.0 TDI Sportback](#)  
[A3 \[8VA\] Sportback - A3 2.0 TDI Sportback quattro](#)  
[A3 \[8VA\] Sportback - A3 1.8 FSI Sportback quattro](#)  
[A3 \[8VA\] Sportback - A3 1.8 TFSI Sportback](#)  
[A3 \[8VA\] Sportback - A3 1.6 TDI Sportback](#)  
[A3 \[8VA\] Sportback - A3 1.2 TFSI Sportback](#)  
[A6 \[4G2, C7\] - A6 2.8 FSI quattro](#)  
[A6 \[4G2, C7\] - A6 2.8 FSI](#)  
[A6 \[4G2, C7\] - A6 3.0 TDI](#)  
[A6 \[4G2, C7\] - A6 2.0 TDI](#)  
[A6 \[4G2, C7\] - A6 3.0 TDI quattro](#)  
[A6 \[4G2, C7\] - A6 3.0 TFSI quattro](#)  
[A6 \[4G2, C7\] - A6 2.0 FSI](#)  
[A6 \[4G2, C7\] - A6 2.0 TFSI Hybrid](#)  
[A6 \[4G5, C7\] Avant - A6 3.0 TFSI Avant quattro](#)  
[A6 \[4G5, C7\] Avant - A6 3.0 TDI Avant quattro](#)  
[A6 \[4G5, C7\] Avant - A6 2.0 TDI Avant](#)  
[A6 \[4G5, C7\] Avant - A6 3.0 TDI Avant](#)  
[A6 \[4G5, C7\] Avant - A6 2.8 FSI Avant](#)  
[A6 \[4G5, C7\] Avant - A6 2.8 FSI Avant quattro](#)  
[A6 \[4G5, C7\] Avant - A6 2.0 FSI Avant](#)  
[A6 \[4GH, C7\] Avant Allroad - A6 3.0 TDI Avant Allroad](#)  
[A6 \[4GH, C7\] Avant Allroad - A6 3.0 TFSI Avant Allroad](#)  
[A7 \[4GA\] Sportback - A7 3.0 TFSI Sportback quattro](#)  
[A7 \[4GA\] Sportback - A7 3.0 TDI Sportback quattro](#)  
[A7 \[4GA\] Sportback - A7 2.8 FSI Sportback quattro](#)  
[A7 \[4GA\] Sportback - A7 2.8 FSI Sportback](#)  
[A7 \[4GA\] Sportback - A7 3.0 TDI Sportback](#)  
[A8 \[4H, D4\] - A8 4.2 TDI quattro](#)  
[A8 \[4H, D4\] - A8 4.2 FSI quattro](#)  
[A8 \[4H, D4\] - A8 3.0 TFSI quattro](#)  
[A8 \[4H, D4\] - A8 3.0 TDI quattro](#)  
[A8 \[4H, D4\] - A8 6.3 FSI quattro](#)  
[A8 \[4H, D4\] - A8 2.0 TFSI Hybrid](#)  
[A8 \[4H, D4\] - A8 4.0 FSI quattro](#)  
[RS6 \[4G5, C7\] Avant - RS6 4.0 TFSI Avant quattro](#)  
[S3 \[8V1\] - S3 2.0 TFSI quattro](#)

[S6 \[4G2, C7\] - S6 4.0 TFSI quattro](#)

[S6 \[4G5, C7\] Avant - S6 4.0 TFSI Avant quattro](#)

[S8 \[4H, D4\] - S8 4.0 FSI quattro](#)

AUDI					A3 [8PA] Sportback - A3 1.4 TFSI Sportback	
Year	Engine	Liters	HP	System	Functions	
2007/06 - 2012/08	CAXC	1.4	125	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>	

AUDI					A3 [8V1] - A3 1.4 TFSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> </ul> </li> </ul>	

- Ignition circuit 1 Front airbag front passenger side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value

2012/04 -	CMBA	1.4	122	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> </ul>
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				<ul style="list-style-type: none"> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>2</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side</li> <li>front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side</li> <li>front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side</li> <li>front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>value</li> </ul> </li> </ul>

2013/01 -	CPTA	1.4	140	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front pass. side:Ohm value</li> <li>- Driver side front belt force limiter ign.circuit: Ohm value</li> <li>- Passenger side front belt force limiter ign.circuit: Ohm value</li> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> </ul>
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					<ul style="list-style-type: none"> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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AUDI					A3 [8V1] - A3 1.8 FSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> </ul> </li> </ul>	

2012/04  
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CJSA

1.8

180

Airbag  
Airbag AB 20 UDS

- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value

- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1: Ohm value
- Seat belt lock switch center 2 row
- 2nd row, driver side, buckle switch
- 2nd row, passenger side, buckle switch
- Ignition circuit, Battery disconnection
- 3rd row driver side buckle switch
- 3rd row passenger side buckle switch
- Seat occupied sensor fault status
- Ignition circuit 2, belt tensioner, front driver side

					<p>2</p> <ul style="list-style-type: none"> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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**AUDI A3 [8V1] - A3 2.0 TDI**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm</li> </ul> </li> </ul>

2012/04  
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CRBC

2.0

150

Airbag  
Airbag AB 20 UDS

value

- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle

				<p>characteristic 4</p> <ul style="list-style-type: none"> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side 2</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side</li> </ul> </li> </ul>



2012/10  
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CRLB

2.0

150

Airbag  
Airbag AB 20 UDS

front

- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status

- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1: Ohm value
- Seat belt lock switch center 2 row
- 2nd row, driver side, buckle switch
- 2nd row, passenger side, buckle switch
- Ignition circuit, Battery disconnection
- 3rd row driver side buckle switch
- 3rd row passenger side buckle switch
- Seat occupied sensor fault status
- Ignition circuit 2, belt tensioner, front driver side 2
- Ignition circuit 2, belt tensioner, front passenger side
- **Actuators**
- Failure lamp

					<ul style="list-style-type: none"> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit:</li> </ul> </li> </ul>

2013/05  
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CUPA

2.0

184

Airbag  
Airbag AB 20 UDS

Ohm value

- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1

				<ul style="list-style-type: none"> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> </ul> </li> </ul>

2013/01 -	CRFC	2.0	143	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front pass. side:Ohm value</li> <li>- Driver side front belt force limiter ign.circuit: Ohm value</li> <li>- Passenger side front belt force limiter ign.circuit: Ohm value</li> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> </ul>
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				<ul style="list-style-type: none"> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b></li> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front pass.</li> </ul> </li> </ul>



2012/09  
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CLHA

1.6

105

Airbag  
Airbag AB 20 UDS

side:Ohm value

- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition

					<p>circuit</p> <ul style="list-style-type: none"> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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AUDI					A3 [8V1] - A3 1.8 FSI quattro	
Year	Engine	Liters	HP	System	Functions	
					<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front</li> </ul>	

2012/08 -	CJSB	1.8	180	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front pass. side:Ohm value</li> <li>- Driver side front belt force limiter ign.circuit: Ohm value</li> <li>- Passenger side front belt force limiter ign.circuit: Ohm value</li> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> </ul>
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- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1: Ohm value
- Seat belt lock switch center 2 row
- 2nd row, driver side, buckle switch
- 2nd row, passenger side, buckle switch
- Ignition circuit, Battery disconnection
- 3rd row driver side buckle switch
- 3rd row passenger side buckle switch
- Seat occupied sensor fault status
- Ignition circuit 2, belt tensioner, front driver side
- Ignition circuit 2, belt tensioner, front passenger side
- **Actuators**
  - Failure lamp
  - Collision signal
  - Airbag indicator light OFF
  - Activate component protection
  - Crash signal/all belt tensioners
  - Anti-roll bar triggering
  - Vehicle conditioning

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> </ul> </li> </ul>

2012/10  
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CRBC

2.0

150

Airbag  
Airbag AB 20 UDS

- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit

				<ul style="list-style-type: none"> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit</li> </ul> </li> </ul>

2012/12 -	CUPA	2.0	184	Airbag Airbag AB 20 UDS	<p>resistance</p> <ul style="list-style-type: none"> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front pass. side:Ohm value</li> <li>- Driver side front belt force limiter ign.circuit: Ohm value</li> <li>- Passenger side front belt force limiter ign.circuit: Ohm value</li> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> </ul>
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					<ul style="list-style-type: none"> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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AUDI					A3 [8V1] - A3 1.2 TFSI	
Year	Engine	Liters	HP	System	Functions	

- **Identification**
  - **Clear errors**
  - **Error memory**
  - **Current values**
    - Data registration
    - Seat occupation detection
    - Power supply Clamp 15
    - Key switch position
    - Ignition circuit windowbag driver's side
    - Ignition circuit windowbag front passenger's side
    - Seat allocation detection front passenger side
- front
- Ignition circuit 1 Front airbag driver side
  - Ignition circuit 1 Front airbag front passenger side
- side
- Pass. side knee airbag, ign. circuit
  - Ignition circuit knee bag driver's side front
  - Ignition circuit side airbag driver side front
  - Ignition circuit side airbag front passenger side
- front
- Ignition circuit pretensioner driver side front
  - Ignition circuit pretensioner front passenger side
- front
- Seat belt lock switch driver seat front
  - Seat belt lock switch front passenger seat
  - Ignition circuit 2 Front airbag driver side
  - Ignition circuit 2 Front airbag front passenger side
- side
- Ignition circuit seat belt strength limiter front driver's side
  - Ignition circuit seat belt strength limiter front passenger's side
  - Driver side pedestrian protection ign.circuit resistance
  - Passenger side pedestrian protection ign.circuit resistance
  - Resistance key switch, contact 1
  - Resistance key switch, contact 2
  - Driver side front airbag ignition circuit 2: Ohm value
  - Passenger side front airbag ignition circuit 2: Ohm value
  - Driver side front side airbag ignition circuit: Ohm value
  - Passenger side front side airbag ignition circuit: Ohm value
  - Driver side rear side airbag ignition circuit: Ohm value
  - Passenger side rear side airbag ignition circuit: Ohm value
  - Driver side windowbag ignition circuit: Ohm value
  - Passenger side windowbag ignition circuit: Ohm value
  - Driver side front kneebag ignition circuit: Ohm value
  - Passenger side front kneebag ignition circuit: Ohm value
  - Driver side front belt tensioner ign.circuit: Ohm value
  - Passenger side front belt tensioner ign.circuit: Ohm value
  - Ignition circuit 2,belt tensioner,front driver side:Ohm value
  - Ignition circuit 2,belt tensioner,front pass. side:Ohm value
  - Driver side front belt force limiter ign.circuit: Ohm value

2012/12  
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CJZA

1.2

105

Airbag  
Airbag AB 20 UDS

- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit

					<ul style="list-style-type: none"> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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AUDI A3 [8VA] Sportback - A3 1.4 TFSI Sportback					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> </ul> </li> </ul>

2012/09 -	CMBA	1.4	122	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front pass. side:Ohm value</li> <li>- Driver side front belt force limiter ign.circuit: Ohm value</li> <li>- Passenger side front belt force limiter ign.circuit: Ohm value</li> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> </ul>
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				<ul style="list-style-type: none"> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> </ul> </li> </ul>

- Seat occupation detection
- Power supply Clamp 15
- Key switch position
- Ignition circuit windowbag driver's side
- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side
- front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side
- front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side
- front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit:

2013/02	CPTA	1.4	140	Airbag Airbag AB 20 UDS	<p>Ohm value</p> <ul style="list-style-type: none"> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> </ul>
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					<ul style="list-style-type: none"> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side 2</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b></li> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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AUDI					A3 [8VA] Sportback - A3 2.0 TDI Sportback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> </ul>	

2012/09  
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CRBC

2.0

150

Airbag  
Airbag AB 20 UDS

- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1

				<ul style="list-style-type: none"> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side 2</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b></li> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> </ul>

- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side
- front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side
- front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side
- front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value

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				<ul style="list-style-type: none"> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> </ul> <p>2</p> <ul style="list-style-type: none"> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
				<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side</li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> </ul> <p>side</p> <ul style="list-style-type: none"> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side</li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side</li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> </ul> <p>side</p> <ul style="list-style-type: none"> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> </ul> <p>passenger's side</p> <ul style="list-style-type: none"> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> </ul> <ul style="list-style-type: none"> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> </ul>

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CRFC

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Airbag  
Airbag AB 20 UDS

- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2

					<ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side 2</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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AUDI					A3 [8VA] Sportback - A3 2.0 TDI Sportback quattro	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger</li> </ul> </li> </ul>	



side

- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value

-	CUPA	2.0	184	Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> </ul>
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					<ul style="list-style-type: none"> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>2</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side</li> </ul> </li> <li>front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side</li> <li>front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side</li> <li>front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>value</li> <li>- Passenger side windowbag ignition circuit: Ohm</li> </ul>

2013/02

CRBC

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150

Airbag  
Airbag AB 20 UDS

value

- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status

					<ul style="list-style-type: none"> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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AUDI					A3 [8VA] Sportback - A3 1.8 FSI Sportback quattro	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side</li> </ul> </li> </ul>	

2013/05 -	CJSB	1.8	180	Airbag Airbag AB 20 UDS	front <ul style="list-style-type: none"> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side</li> </ul> front <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> </ul> side <ul style="list-style-type: none"> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front pass. side:Ohm value</li> <li>- Driver side front belt force limiter ign.circuit: Ohm value</li> <li>- Passenger side front belt force limiter ign.circuit: Ohm value</li> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> </ul>
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- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1: Ohm value
- Seat belt lock switch center 2 row
- 2nd row, driver side, buckle switch
- 2nd row, passenger side, buckle switch
- Ignition circuit, Battery disconnection
- 3rd row driver side buckle switch
- 3rd row passenger side buckle switch
- Seat occupied sensor fault status
- Ignition circuit 2, belt tensioner, front driver side
- Ignition circuit 2, belt tensioner, front passenger

					side <b>• Actuators</b> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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AUDI						A3 [8VA] Sportback - A3 1.8 TFSI Sportback					
Year	Engine	Liters	HP	System		Functions					
						<b>• Identification</b> <b>• Clear errors</b> <b>• Error memory</b> <b>• Current values</b> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side side - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value - Passenger side rear side airbag ignition circuit: Ohm value - Driver side windowbag ignition circuit: Ohm value - Passenger side windowbag ignition circuit: Ohm					



2012/09	CJSA	1.8	180	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front pass. side:Ohm value</li> <li>- Driver side front belt force limiter ign.circuit: Ohm value</li> <li>- Passenger side front belt force limiter ign.circuit: Ohm value</li> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> </ul>
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					<ul style="list-style-type: none"> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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AUDI					A3 [8VA] Sportback - A3 1.6 TDI Sportback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side</li> </ul> </li> </ul>	

2013/01 -	CLHA	1.6	105	Airbag Airbag AB 20 UDS	front - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side side - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value - Passenger side rear side airbag ignition circuit: Ohm value - Driver side windowbag ignition circuit: Ohm value - Passenger side windowbag ignition circuit: Ohm value - Driver side front kneebag ignition circuit: Ohm value - Passenger side front kneebag ignition circuit: Ohm value - Driver side front belt tensioner ign.circuit: Ohm value - Passenger side front belt tensioner ign.circuit: Ohm value - Ignition circuit 2,belt tensioner,front driver side:Ohm value - Ignition circuit 2,belt tensioner,front pass. side:Ohm value - Driver side front belt force limiter ign.circuit: Ohm value - Passenger side front belt force limiter ign.circuit: Ohm value - Driver side rear belt tensioner ign.circuit: Ohm value - Passenger side rear belt tensioner ign.circuit: Ohm value - Battery isolator ignition circuit: Ohm value - Driver side front seat position sensor: Current value - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value
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- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1: Ohm value
- Seat belt lock switch center 2 row
- 2nd row, driver side, buckle switch
- 2nd row, passenger side, buckle switch
- Ignition circuit, Battery disconnection
- 3rd row driver side buckle switch
- 3rd row passenger side buckle switch
- Seat occupied sensor fault status
- Ignition circuit 2, belt tensioner, front driver side
- Ignition circuit 2, belt tensioner, front passenger

					side <b>• Actuators</b> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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AUDI						A3 [8VA] Sportback - A3 1.2 TFSI Sportback					
Year	Engine	Liters	HP	System		Functions					
						<b>• Identification</b> <b>• Clear errors</b> <b>• Error memory</b> <b>• Current values</b> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side side - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value - Passenger side rear side airbag ignition circuit: Ohm value - Driver side windowbag ignition circuit: Ohm value - Passenger side windowbag ignition circuit: Ohm					

2013/05  
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CJZA

1.2

105

Airbag  
Airbag AB 20 UDS

value

- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status

					<ul style="list-style-type: none"> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side 2</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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AUDI					A6 [4G2, C7] - A6 2.8 FSI quattro	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> </ul> </li> </ul>	

Anti-block system  
Electrohydr. brake (SBC3)

- rear left tire speed
- valve relay status
- pressure sensor
- Driving wheels angle
- Actual values selection
- rotation angle sensor 2
- Residual acceleration sensor 2
- Power supply Clamp 30
- ABS hydraulic/return pump
- ESP brake application CAN signal
- Front left speed sensor installation position
- Front right speed sensor installation position
- Rear left speed sensor installation position
- Rear right speed sensor installation position
- Front left speed sensor direction of rotation
- Front right speed sensor direction of rotation
- Rear left speed sensor direction of rotation
- Rear right speed sensor direction of rotation
- Lateral acceleration sensor 1
- ESP button status
- Brake booster pressure actual value
- Engine control unit brake application CAN signal
- Status Handbrake
- HFM Ratio
- Yaw rate sensor 1

Cruise control  
ACC 4.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - ACC sensor adjustment
  - Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up



2010/11  
-

CHVA

2.8

204

- Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal value
  - Rear left vehicle level sensor, PWM signal value
  - Rear right vehicle level sensor, PWM signal value
  - Compressor ambient temperature
  - Extreme level detected
  - System pressure sensor power supply
  - Left vehicle level sensor power supply
  - Right vehicle level sensor power supply
  - Solenoid valve block power supply
  - Front left damper valve current
  - Front right damper valve current
  - Rear left damper valve current
  - Rear right damper valve current
  - Front left damper PWM signal value
  - Front right damper PWM signal value
  - Rear left damper PWM signal value
  - Rear right damper PWM signal value
  - Accumulator control possible
  - Last measured value, air suspension, front left
  - Last measured value, air suspension, front right
  - Last measured value, air suspension, rear left

Underbody/Steering  
Adaptive suspension system 4.0

- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations

- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current, Hard

					<ul style="list-style-type: none"> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
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<b>AUDI</b>	<b>A6 [4G2, C7] - A6 2.8 FSI</b>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> </ul>

Cruise control  
ACC 4.1

- **Current values**

- Calculated vehicle speed
- Power supply Clamp 15
- Software version
- Vertical angle deviation
- Horizontal angle deviation
- Radar beam 1 intensity
- Radar beam 2 intensity
- Radar beam 3 intensity
- Radar beam 4 intensity
- Radar status
- Misalignment angle
- ACC lens heating actuation signal
- Radar beam 1 and 2 medium intensity
- Misalignment angle 2
- Control unit temperature
- System identification
- Calculated vehicle acceleration

- **Actuators**

- Lens heating actuation
- ACC lens adjustment

- **Identification**

- **Clear errors**

- **Adjustments / settings**

- Transfer configuration
- Adjustment of vehicle level sensors
- Activate air suspension
- Adaptation of normal level
- Wheel alignment
- Activate/deactivate shipment mode

- **Special functions**

- Pressure reduction
- Pressure accumulator, preload pressure
- Pressure build-up
- Charge air suspension struts

- **Error memory**

- **Current values**

- Vehicle driving speed
- Engine revolution
- stop lights switch
- air tank pressure
- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status

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Underbody/Steering

- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left

Adaptive suspension system 4.0

- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration

					<ul style="list-style-type: none"> <li>- Front right body acceleration</li> <li>- Rear body acceleration</li> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
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AUDI					A6 [4G2, C7] - A6 3.0 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> </ul> </li> </ul>	



Anti-block system  
Electrohydr. brake (SBC3)

- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- valve relay status
- pressure sensor
- Driving wheels angle
- Actual values selection
- rotation angle sensor 2
- Residual acceleration sensor 2
- Power supply Clamp 30
- ABS hydraulic/return pump
- ESP brake application CAN signal
- Front left speed sensor installation position
- Front right speed sensor installation position
- Rear left speed sensor installation position
- Rear right speed sensor installation position
- Front left speed sensor direction of rotation
- Front right speed sensor direction of rotation
- Rear left speed sensor direction of rotation
- Rear right speed sensor direction of rotation
- Lateral acceleration sensor 1
- ESP button status
- Brake booster pressure actual value
- Engine control unit brake application CAN signal
- Status Handbrake
- HFM Ratio
- Yaw rate sensor 1

Cruise control  
ACC 4.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - ACC sensor adjustment
  - Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**

- Pressure reduction
- Pressure accumulator, preload pressure
- Pressure build-up
- Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal value
  - Rear left vehicle level sensor, PWM signal value
  - Rear right vehicle level sensor, PWM signal value
  - Compressor ambient temperature
  - Extreme level detected
  - System pressure sensor power supply
  - Left vehicle level sensor power supply
  - Right vehicle level sensor power supply
  - Solenoid valve block power supply
  - Front left damper valve current
  - Front right damper valve current
  - Rear left damper valve current
  - Rear right damper valve current
  - Front left damper PWM signal value
  - Front right damper PWM signal value
  - Rear left damper PWM signal value
  - Rear right damper PWM signal value
  - Accumulator control possible

Underbody/Steering  
Adaptive suspension system 4.0

- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status

- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
  - Button lights
  - Central pressure accum., pressure discharge
  - Centr. pressure accum., charging
  - Air suspension compressor relay
  - Front left air spring valve
  - Front right air spring valve
  - Rear left air spring valve
  - Rear right air spring valve
  - Damper adjustment valve current

					<ul style="list-style-type: none"> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
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<b>AUDI</b>	<b>A6 [4G2, C7] - A6 2.0 TDI</b>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> </ul> </li> </ul>

Cruise control  
ACC 4.1

- ACC sensor adjustment
- Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act. current
  - Rear left damper valve act. current

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- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset

Underbody/Steering  
Adaptive suspension system 4.0

- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising



				<ul style="list-style-type: none"> <li>- Act. MMI setting Trailer mode</li> <li>- Specified normal level status</li> <li>- Front left body acceleration</li> <li>- Front right body acceleration</li> <li>- Rear body acceleration</li> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b></li> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> <li>• <b>Adjustments / settings</b></li> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> <li>• <b>Special functions</b></li> <li>- Bleed</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> </ul>

Anti-block system  
Electrohydr. brake (SBC3)

- rare right tire speed
- rear left tire speed
- valve relay status
- pressure sensor
- Driving wheels angle
- Actual values selection
- rotation angle sensor 2
- Residual acceleration sensor 2
- Power supply Clamp 30
- ABS hydraulic/return pump
- ESP brake application CAN signal
- Front left speed sensor installation position
- Front right speed sensor installation position
- Rear left speed sensor installation position
- Rear right speed sensor installation position
- Front left speed sensor direction of rotation
- Front right speed sensor direction of rotation
- Rear left speed sensor direction of rotation
- Rear right speed sensor direction of rotation
- Lateral acceleration sensor 1
- ESP button status
- Brake booster pressure actual value
- Engine control unit brake application CAN signal
- Status Handbrake
- HFM Ratio
- Yaw rate sensor 1

Cruise control  
ACC 4.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - ACC sensor adjustment
  - Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure

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- Pressure build-up
- Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal value
  - Rear left vehicle level sensor, PWM signal value
  - Rear right vehicle level sensor, PWM signal value
  - Compressor ambient temperature
  - Extreme level detected
  - System pressure sensor power supply
  - Left vehicle level sensor power supply
  - Right vehicle level sensor power supply
  - Solenoid valve block power supply
  - Front left damper valve current
  - Front right damper valve current
  - Rear left damper valve current
  - Rear right damper valve current
  - Front left damper PWM signal value
  - Front right damper PWM signal value
  - Rear left damper PWM signal value
  - Rear right damper PWM signal value
  - Accumulator control possible
  - Last measured value, air suspension, front left
  - Last measured value, air suspension, front right

Underbody/Steering  
Adaptive suspension system 4.0

- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations

- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current,

					<p>Hard</p> <ul style="list-style-type: none"> <li>- Front right damper adjustment valve current, Soft</li> </ul> <p>Hard</p> <ul style="list-style-type: none"> <li>- Front right damper adjustment valve current, Hard</li> </ul> <p>Soft</p> <ul style="list-style-type: none"> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> </ul> <p>Hard</p> <ul style="list-style-type: none"> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
				<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> </ul> </li> </ul>

Cruise control  
ACC 4.1

- Horizontal angle deviation
- Radar beam 1 intensity
- Radar beam 2 intensity
- Radar beam 3 intensity
- Radar beam 4 intensity
- Radar status
- Misalignment angle
- ACC lens heating actuation signal
- Radar beam 1 and 2 medium intensity
- Misalignment angle 2
- Control unit temperature
- System identification
- Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select

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Underbody/Steering  
Adaptive suspension system 4.0

- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys



- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation

					<ul style="list-style-type: none"> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
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AUDI					A6 [4G2, C7] - A6 3.0 TDI quattro	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> </ul> </li> </ul>	

<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul>
<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> </ul>

2011/02

CLAA

3.0

204

• **Current values**

- Vehicle driving speed
- Engine revolution
- stop lights switch
- air tank pressure
- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage

Underbody/Steering  
Adaptive suspension system 4.0

- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations

- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current, Hard
- Front right damper adjustment valve current, Soft

				<ul style="list-style-type: none"> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
			<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
			<p>Cruise control</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> </ul> </li> </ul>

ACC 4.1

- Radar beam 2 intensity
- Radar beam 3 intensity
- Radar beam 4 intensity
- Radar status
- Misalignment angle
- ACC lens heating actuation signal
- Radar beam 1 and 2 medium intensity
- Misalignment angle 2
- Control unit temperature
- System identification
- Calculated vehicle acceleration

• **Actuators**

- Lens heating actuation
- ACC lens adjustment

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Transfer configuration
- Adjustment of vehicle level sensors
- Activate air suspension
- Adaptation of normal level
- Wheel alignment
- Activate/deactivate shipment mode

• **Special functions**

- Pressure reduction
- Pressure accumulator, preload pressure
- Pressure build-up
- Charge air suspension struts

• **Error memory**

• **Current values**

- Vehicle driving speed
- Engine revolution
- stop lights switch
- air tank pressure
- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height



2010/11

CDUC

3.0

245

Underbody/Steering  
Adaptive suspension system 4.0

- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle

- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left

					<ul style="list-style-type: none"> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
				<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul>
Cruise control ACC 4.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> </ul> </li> </ul>

2011/12

CGQB

3.0

313

- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level

Underbody/Steering  
Adaptive suspension system 4.0

- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations

- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current, Hard
- Front right damper adjustment valve current, Soft
- Front right damper adjustment valve current, Hard
- Rear left damper adjustment valve current, Soft
- Rear left damper adjustment valve current, Hard
- Rear right damper adjustment valve current, Soft
- Rear right damper adjustment valve current, Hard

				<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
				<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> </ul> </li> </ul>



- Misalignment angle 2
- Control unit temperature
- System identification
- Calculated vehicle acceleration

• **Actuators**

- Lens heating actuation
- ACC lens adjustment

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Transfer configuration
- Adjustment of vehicle level sensors
- Activate air suspension
- Adaptation of normal level
- Wheel alignment
- Activate/deactivate shipment mode

• **Special functions**

- Pressure reduction
- Pressure accumulator, preload pressure
- Pressure build-up
- Charge air suspension struts

• **Error memory**

• **Current values**

- Vehicle driving speed
- Engine revolution
- stop lights switch
- air tank pressure
- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value

value

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Underbody/Steering  
Adaptive suspension system 4.0

- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour

- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left

				<ul style="list-style-type: none"> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
			<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul>
Cruise control ACC 4.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> <li>- All doors status</li> <li>- Ventilation solenoid valve</li> <li>- Central locking status</li> <li>- Installing position sensor front left</li> <li>- Installing position sensor front right</li> <li>- Installing position sensor rear left</li> <li>- Installing position sensor rear right</li> </ul> </li> </ul>

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- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level

Underbody/Steering  
Adaptive suspension system 4.0

- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations

					<ul style="list-style-type: none"> <li>- No.of front right additional volume valve actuation operations</li> <li>- No.of rear left additional volume valve actuation operations</li> <li>- No.of rear right additional volume valve actuation operations</li> <li>- Level control active controller</li> <li>- Level control, control requirement</li> <li>- Current lane recognition mode</li> <li>- Steering angle sensor: Direction positive/negative</li> <li>- Act. MMI setting Jack mode</li> <li>- Act. MMI setting Suspension raising</li> <li>- Act. MMI setting Trailer mode</li> <li>- Specified normal level status</li> <li>- Front left body acceleration</li> <li>- Front right body acceleration</li> <li>- Rear body acceleration</li> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b></li> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
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AUDI					A6 [4G2, C7] - A6 3.0 TFSI quattro	
Year	Engine	Liters	HP	System	Functions	
					• Identification	



Anti-block system  
Electrohydr. brake (SBC3)

- **Clear errors**
- **Functional tests**
  - Pulse-wheel test
  - Actuator test
  - ESP test
- **Adjustments / settings**
  - Reset brake temperature monitoring
  - Brake temperature monitoring information
  - Sensor unit zero position compensation
  - Reset puncture indicator
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Engine revolution
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - valve relay status
  - pressure sensor
  - Driving wheels angle
  - Actual values selection
  - rotation angle sensor 2
  - Residual acceleration sensor 2
  - Power supply Clamp 30
  - ABS hydraulic/return pump
  - ESP brake application CAN signal
  - Front left speed sensor installation position
  - Front right speed sensor installation position
  - Rear left speed sensor installation position
  - Rear right speed sensor installation position
  - Front left speed sensor direction of rotation
  - Front right speed sensor direction of rotation
  - Rear left speed sensor direction of rotation
  - Rear right speed sensor direction of rotation
  - Lateral acceleration sensor 1
  - ESP button status
  - Brake booster pressure actual value
  - Engine control unit brake application CAN signal
  - Status Handbrake
  - HFM Ratio
  - Yaw rate sensor 1

Cruise control  
ACC 4.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - ACC sensor adjustment
  - Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification

- Calculated vehicle acceleration

• **Actuators**

- Lens heating actuation
- ACC lens adjustment

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Transfer configuration
- Adjustment of vehicle level sensors
- Activate air suspension
- Adaptation of normal level
- Wheel alignment
- Activate/deactivate shipment mode

• **Special functions**

- Pressure reduction
- Pressure accumulator, preload pressure
- Pressure build-up
- Charge air suspension struts

• **Error memory**

• **Current values**

- Vehicle driving speed
- Engine revolution
- stop lights switch
- air tank pressure
- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value

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Underbody/Steering  
Adaptive suspension system 4.0

- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year

- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right

				<ul style="list-style-type: none"> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
			<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul>
	<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> <li>- All doors status</li> <li>- Ventilation solenoid valve</li> <li>- Central locking status</li> <li>- Installing position sensor front left</li> <li>- Installing position sensor front right</li> <li>- Installing position sensor rear left</li> <li>- Installing position sensor rear right</li> <li>- Longitudinal acceleration</li> <li>- System pressure</li> <li>- Power supply Clamp 15</li> </ul> </li> </ul>

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CGXB

3.0

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- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level

Underbody/Steering  
Adaptive suspension system 4.0

- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation



				<p>operations</p> <ul style="list-style-type: none"> <li>- No.of rear right additional volume valve actuation</li> </ul> <p>operations</p> <ul style="list-style-type: none"> <li>- Level control active controller</li> <li>- Level control, control requirement</li> <li>- Current lane recognition mode</li> <li>- Steering angle sensor: Direction</li> </ul> <p>positive/negative</p> <ul style="list-style-type: none"> <li>- Act. MMI setting Jack mode</li> <li>- Act. MMI setting Suspension raising</li> <li>- Act. MMI setting Trailer mode</li> <li>- Specified normal level status</li> <li>- Front left body acceleration</li> <li>- Front right body acceleration</li> <li>- Rear body acceleration</li> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
				<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Functional tests</b></p> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> <p>• <b>Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> </ul>

Anti-block system  
Electrohydr. brake (SBC3)

- Sensor unit zero position compensation
- Reset puncture indicator
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Engine revolution
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - valve relay status
  - pressure sensor
  - Driving wheels angle
  - Actual values selection
  - rotation angle sensor 2
  - Residual acceleration sensor 2
  - Power supply Clamp 30
  - ABS hydraulic/return pump
  - ESP brake application CAN signal
  - Front left speed sensor installation position
  - Front right speed sensor installation position
  - Rear left speed sensor installation position
  - Rear right speed sensor installation position
  - Front left speed sensor direction of rotation
  - Front right speed sensor direction of rotation
  - Rear left speed sensor direction of rotation
  - Rear right speed sensor direction of rotation
  - Lateral acceleration sensor 1
  - ESP button status
  - Brake booster pressure actual value
  - Engine control unit brake application CAN signal
  - Status Handbrake
  - HFM Ratio
  - Yaw rate sensor 1

Cruise control  
ACC 4.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - ACC sensor adjustment
  - Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**

- Transfer configuration
- Adjustment of vehicle level sensors
- Activate air suspension
- Adaptation of normal level
- Wheel alignment
- Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal value
  - Rear left vehicle level sensor, PWM signal value
  - Rear right vehicle level sensor, PWM signal value
  - Compressor ambient temperature
  - Extreme level detected
  - System pressure sensor power supply
  - Left vehicle level sensor power supply
  - Right vehicle level sensor power supply
  - Solenoid valve block power supply
  - Front left damper valve current
  - Front right damper valve current

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- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
  - Button lights
  - Central pressure accum., pressure discharge

					<ul style="list-style-type: none"> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
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<b>AUDI</b>	<b>A6 [4G2, C7] - A6 2.0 FSI</b>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul>
	<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> <li>- All doors status</li> <li>- Ventilation solenoid valve</li> <li>- Central locking status</li> <li>- Installing position sensor front left</li> <li>- Installing position sensor front right</li> <li>- Installing position sensor rear left</li> <li>- Installing position sensor rear right</li> <li>- Longitudinal acceleration</li> <li>- System pressure</li> <li>- Power supply Clamp 15</li> <li>- Hatchback status</li> <li>- Ambient temperature</li> <li>- Brake pressure</li> </ul> </li> </ul>

2011/05  
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CDNB

2.0

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- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height



Underbody/Steering  
Adaptive suspension system 4.0

- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations

				<ul style="list-style-type: none"> <li>- Level control active controller</li> <li>- Level control, control requirement</li> <li>- Current lane recognition mode</li> <li>- Steering angle sensor: Direction positive/negative</li> <li>- Act. MMI setting Jack mode</li> <li>- Act. MMI setting Suspension raising</li> <li>- Act. MMI setting Trailer mode</li> <li>- Specified normal level status</li> <li>- Front left body acceleration</li> <li>- Front right body acceleration</li> <li>- Rear body acceleration</li> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> </ul>

Anti-block system  
Electrohydr. brake (SBC3)

- **Error memory**
- **Current values**
  - Engine revolution
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - valve relay status
  - pressure sensor
  - Driving wheels angle
  - Actual values selection
  - rotation angle sensor 2
  - Residual acceleration sensor 2
  - Power supply Clamp 30
  - ABS hydraulic/return pump
  - ESP brake application CAN signal
  - Front left speed sensor installation position
  - Front right speed sensor installation position
  - Rear left speed sensor installation position
  - Rear right speed sensor installation position
  - Front left speed sensor direction of rotation
  - Front right speed sensor direction of rotation
  - Rear left speed sensor direction of rotation
  - Rear right speed sensor direction of rotation
  - Lateral acceleration sensor 1
  - ESP button status
  - Brake booster pressure actual value
  - Engine control unit brake application CAN signal
  - Status Handbrake
  - HFM Ratio
  - Yaw rate sensor 1

Cruise control  
ACC 4.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - ACC sensor adjustment
  - Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension

- Adaptation of normal level
- Wheel alignment
- Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal value
  - Rear left vehicle level sensor, PWM signal value
  - Rear right vehicle level sensor, PWM signal value
  - Compressor ambient temperature
  - Extreme level detected
  - System pressure sensor power supply
  - Left vehicle level sensor power supply
  - Right vehicle level sensor power supply
  - Solenoid valve block power supply
  - Front left damper valve current
  - Front right damper valve current
  - Rear left damper valve current
  - Rear right damper valve current
  - Front left damper PWM signal value

2011/03 -	CAEB	2.0	211	<p>Underbody/Steering Adaptive suspension system 4.0</p>	<ul style="list-style-type: none"> <li>- Front right damper PWM signal value</li> <li>- Rear left damper PWM signal value</li> <li>- Rear right damper PWM signal value</li> <li>- Accumulator control possible</li> <li>- Last measured value, air suspension, front left</li> <li>- Last measured value, air suspension, front right</li> <li>- Last measured value, air suspension, rear left</li> <li>- Last measured value, air suspension, rear right</li> <li>- Current mileage</li> <li>- Front vehicle level set value</li> <li>- Rear vehicle level set value</li> <li>- Load level button: Raise</li> <li>- Load level button: Lower</li> <li>- Load level button: Redundant signal</li> <li>- Load level button LED</li> <li>- Air suspension: Requested level</li> <li>- Air suspension: Current level</li> <li>- Requested damper mode</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Actuators power supply</li> <li>- Front left deviation from learned vehicle level</li> <li>- Front right deviation from learned vehicle level</li> <li>- Rear left deviation from learned vehicle level</li> <li>- Rear right deviation from learned vehicle level</li> <li>- Front left absolute vehicle height</li> <li>- Front right absolute vehicle height</li> <li>- Rear left absolute vehicle height</li> <li>- Rear right absolute vehicle height</li> <li>- Front left normal level height deviation</li> <li>- Front right normal level height deviation</li> <li>- Rear left normal level height deviation</li> <li>- Rear right normal level height deviation</li> <li>- Front left vehicle level sensor: Offset</li> <li>- Front right vehicle level sensor: Offset</li> <li>- Rear left vehicle level sensor: Offset</li> <li>- Rear right vehicle level sensor: Offset</li> <li>- Power supply vehicle level sensor, front left</li> <li>- Power supply vehicle level sensor, front right</li> <li>- Power supply vehicle level sensor, rear right</li> <li>- End basic setting</li> <li>- End running gear setting mode</li> <li>- Number of invalid keys</li> <li>- Readiness for operation</li> <li>- Steering wheel angle sensor: Angle</li> <li>- Air suspension compressor relay</li> <li>- Unlearning counter</li> <li>- Vehicle locking with key</li> <li>- System test result status</li> <li>- Time stamp: Month</li> <li>- Time stamp: Day</li> <li>- Time stamp: Hour</li> <li>- Time stamp: Minute</li> <li>- Time stamp: Second</li> <li>- Time stamp: Year</li> <li>- Operating time in hours</li> <li>- Vehicle inclination analysis</li> <li>- Vehicle axle twist analysis</li> <li>- Internal damper mode</li> <li>- Front left level correction value</li> <li>- Front right level correction value</li> <li>- Rear left level correction value</li> <li>- Rear right level correction value</li> <li>- Jack mode</li> <li>- Terminal 15 status</li> <li>- Compressor operating time air, flow control</li> </ul>
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- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
  - Button lights
  - Central pressure accum., pressure discharge
  - Centr. pressure accum., charging
  - Air suspension compressor relay
  - Front left air spring valve

					<ul style="list-style-type: none"> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
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**AUDI A6 [4G2, C7] - A6 2.0 TFSI Hybrid**

Year	Engine	Liters	HP	System	Functions
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>

Cruise control  
ACC 4.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - ACC sensor adjustment
  - Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right



2011/11

CHJA

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- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation

Underbody/Steering  
Adaptive suspension system 4.0

- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode

					<ul style="list-style-type: none"> <li>- Steering angle sensor: Direction positive/negative</li> <li>- Act. MMI setting Jack mode</li> <li>- Act. MMI setting Suspension raising</li> <li>- Act. MMI setting Trailer mode</li> <li>- Specified normal level status</li> <li>- Front left body acceleration</li> <li>- Front right body acceleration</li> <li>- Rear body acceleration</li> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b></li> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
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AUDI A6 [4G5, C7] Avant - A6 3.0 TFSI Avant quattro					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> </ul> </li> </ul>

Anti-block system  
Electrohydr. brake (SBC3)

- Reset puncture indicator
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Engine revolution
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - valve relay status
  - pressure sensor
  - Driving wheels angle
  - Actual values selection
  - rotation angle sensor 2
  - Residual acceleration sensor 2
  - Power supply Clamp 30
  - ABS hydraulic/return pump
  - ESP brake application CAN signal
  - Front left speed sensor installation position
  - Front right speed sensor installation position
  - Rear left speed sensor installation position
  - Rear right speed sensor installation position
  - Front left speed sensor direction of rotation
  - Front right speed sensor direction of rotation
  - Rear left speed sensor direction of rotation
  - Rear right speed sensor direction of rotation
  - Lateral acceleration sensor 1
  - ESP button status
  - Brake booster pressure actual value
  - Engine control unit brake application CAN signal
  - Status Handbrake
  - HFM Ratio
  - Yaw rate sensor 1

Cruise control  
ACC 4.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - ACC sensor adjustment
  - Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration

- Adjustment of vehicle level sensors
- Activate air suspension
- Adaptation of normal level
- Wheel alignment
- Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal value
  - Rear left vehicle level sensor, PWM signal value
  - Rear right vehicle level sensor, PWM signal value
  - Compressor ambient temperature
  - Extreme level detected
  - System pressure sensor power supply
  - Left vehicle level sensor power supply
  - Right vehicle level sensor power supply
  - Solenoid valve block power supply
  - Front left damper valve current
  - Front right damper valve current
  - Rear left damper valve current

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Underbody/Steering  
Adaptive suspension system 4.0

- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode

- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
  - Button lights
  - Central pressure accum., pressure discharge
  - Centr. pressure accum., charging

				<ul style="list-style-type: none"> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
			<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> </ul>



Cruise control  
ACC 4.1

- Transfer configuration
- ACC sensor adjustment
- Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current

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- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation

Underbody/Steering  
Adaptive suspension system 4.0

- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative

					<ul style="list-style-type: none"> <li>- Act. MMI setting Jack mode</li> <li>- Act. MMI setting Suspension raising</li> <li>- Act. MMI setting Trailer mode</li> <li>- Specified normal level status</li> <li>- Front left body acceleration</li> <li>- Front right body acceleration</li> <li>- Rear body acceleration</li> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b></li> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
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AUDI					A6 [4G5, C7] Avant - A6 3.0 TDI Avant quattro	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b></li> </ul>	

Anti-block system  
Electrohydr. brake (SBC3)

- Bleed
- **Error memory**
- **Current values**
  - Engine revolution
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - valve relay status
  - pressure sensor
  - Driving wheels angle
  - Actual values selection
  - rotation angle sensor 2
  - Residual acceleration sensor 2
  - Power supply Clamp 30
  - ABS hydraulic/return pump
  - ESP brake application CAN signal
  - Front left speed sensor installation position
  - Front right speed sensor installation position
  - Rear left speed sensor installation position
  - Rear right speed sensor installation position
  - Front left speed sensor direction of rotation
  - Front right speed sensor direction of rotation
  - Rear left speed sensor direction of rotation
  - Rear right speed sensor direction of rotation
  - Lateral acceleration sensor 1
  - ESP button status
  - Brake booster pressure actual value
  - Engine control unit brake application CAN signal
  - Status Handbrake
  - HFM Ratio
  - Yaw rate sensor 1

Cruise control  
ACC 4.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - ACC sensor adjustment
  - Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension

- Adaptation of normal level
- Wheel alignment
- Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal value
  - Rear left vehicle level sensor, PWM signal value
  - Rear right vehicle level sensor, PWM signal value
  - Compressor ambient temperature
  - Extreme level detected
  - System pressure sensor power supply
  - Left vehicle level sensor power supply
  - Right vehicle level sensor power supply
  - Solenoid valve block power supply
  - Front left damper valve current
  - Front right damper valve current
  - Rear left damper valve current
  - Rear right damper valve current
  - Front left damper PWM signal value

2011/05 -	CDUC	3.0	245	<p>Underbody/Steering Adaptive suspension system 4.0</p>	<ul style="list-style-type: none"> <li>- Front right damper PWM signal value</li> <li>- Rear left damper PWM signal value</li> <li>- Rear right damper PWM signal value</li> <li>- Accumulator control possible</li> <li>- Last measured value, air suspension, front left</li> <li>- Last measured value, air suspension, front right</li> <li>- Last measured value, air suspension, rear left</li> <li>- Last measured value, air suspension, rear right</li> <li>- Current mileage</li> <li>- Front vehicle level set value</li> <li>- Rear vehicle level set value</li> <li>- Load level button: Raise</li> <li>- Load level button: Lower</li> <li>- Load level button: Redundant signal</li> <li>- Load level button LED</li> <li>- Air suspension: Requested level</li> <li>- Air suspension: Current level</li> <li>- Requested damper mode</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Actuators power supply</li> <li>- Front left deviation from learned vehicle level</li> <li>- Front right deviation from learned vehicle level</li> <li>- Rear left deviation from learned vehicle level</li> <li>- Rear right deviation from learned vehicle level</li> <li>- Front left absolute vehicle height</li> <li>- Front right absolute vehicle height</li> <li>- Rear left absolute vehicle height</li> <li>- Rear right absolute vehicle height</li> <li>- Front left normal level height deviation</li> <li>- Front right normal level height deviation</li> <li>- Rear left normal level height deviation</li> <li>- Rear right normal level height deviation</li> <li>- Front left vehicle level sensor: Offset</li> <li>- Front right vehicle level sensor: Offset</li> <li>- Rear left vehicle level sensor: Offset</li> <li>- Rear right vehicle level sensor: Offset</li> <li>- Power supply vehicle level sensor, front left</li> <li>- Power supply vehicle level sensor, front right</li> <li>- Power supply vehicle level sensor, rear right</li> <li>- End basic setting</li> <li>- End running gear setting mode</li> <li>- Number of invalid keys</li> <li>- Readiness for operation</li> <li>- Steering wheel angle sensor: Angle</li> <li>- Air suspension compressor relay</li> <li>- Unlearning counter</li> <li>- Vehicle locking with key</li> <li>- System test result status</li> <li>- Time stamp: Month</li> <li>- Time stamp: Day</li> <li>- Time stamp: Hour</li> <li>- Time stamp: Minute</li> <li>- Time stamp: Second</li> <li>- Time stamp: Year</li> <li>- Operating time in hours</li> <li>- Vehicle inclination analysis</li> <li>- Vehicle axle twist analysis</li> <li>- Internal damper mode</li> <li>- Front left level correction value</li> <li>- Front right level correction value</li> <li>- Rear left level correction value</li> <li>- Rear right level correction value</li> <li>- Jack mode</li> <li>- Terminal 15 status</li> <li>- Compressor operating time air, flow control</li> </ul>
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- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
  - Button lights
  - Central pressure accum., pressure discharge
  - Centr. pressure accum., charging
  - Air suspension compressor relay
  - Front left air spring valve



				<ul style="list-style-type: none"> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
			<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> </ul> </li> </ul>

Cruise control  
ACC 4.1

- Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current

2012/04

CDUD

3.0

245

- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset

Underbody/Steering  
Adaptive suspension system 4.0

- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode

				<ul style="list-style-type: none"> <li>- Specified normal level status</li> <li>- Front left body acceleration</li> <li>- Front right body acceleration</li> <li>- Rear body acceleration</li> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>

Anti-block system  
Electrohydr. brake (SBC3)

- valve relay status
- pressure sensor
- Driving wheels angle
- Actual values selection
- rotation angle sensor 2
- Residual acceleration sensor 2
- Power supply Clamp 30
- ABS hydraulic/return pump
- ESP brake application CAN signal
- Front left speed sensor installation position
- Front right speed sensor installation position
- Rear left speed sensor installation position
- Rear right speed sensor installation position
- Front left speed sensor direction of rotation
- Front right speed sensor direction of rotation
- Rear left speed sensor direction of rotation
- Rear right speed sensor direction of rotation
- Lateral acceleration sensor 1
- ESP button status
- Brake booster pressure actual value
- Engine control unit brake application CAN signal
- Status Handbrake
- HFM Ratio
- Yaw rate sensor 1

Cruise control  
ACC 4.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - ACC sensor adjustment
  - Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts

2011/12

CGQB

3.0

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• **Error memory**

• **Current values**

- Vehicle driving speed
- Engine revolution
- stop lights switch
- air tank pressure
- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right

Underbody/Steering  
Adaptive suspension system 4.0

- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve



actuation operations

- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program

• **Actuators**

- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current, Hard
- Front right damper adjustment valve current,

				<p>Soft</p> <ul style="list-style-type: none"> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
			<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> </ul> </li> </ul>

Cruise control  
ACC 4.1

- Radar beam 2 intensity
- Radar beam 3 intensity
- Radar beam 4 intensity
- Radar status
- Misalignment angle
- ACC lens heating actuation signal
- Radar beam 1 and 2 medium intensity
- Misalignment angle 2
- Control unit temperature
- System identification
- Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height

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2012/05

CKVB

3.0

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Underbody/Steering  
Adaptive suspension system 4.0

- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle

- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left

					<ul style="list-style-type: none"> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
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AUDI						A6 [4G5, C7] Avant - A6 2.0 TDI Avant					
Year	Engine	Liters	HP	System		Functions					
				Anti-block system Electrohydr. brake (SBC3)		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> </ul> </li> </ul>					

		<ul style="list-style-type: none"> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul>
	<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> </ul> </li> </ul>

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CMGB

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- Engine revolution
- stop lights switch
- air tank pressure
- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value



Underbody/Steering  
Adaptive suspension system 4.0

- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations

- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current, Hard
- Front right damper adjustment valve current, Soft
- Front right damper adjustment valve current, Hard

				<ul style="list-style-type: none"> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
			<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
			<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> </ul> </li> </ul>

- Radar status
- Misalignment angle
- ACC lens heating actuation signal
- Radar beam 1 and 2 medium intensity
- Misalignment angle 2
- Control unit temperature
- System identification
- Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp

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CGLE

2.0

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Underbody/Steering  
Adaptive suspension system 4.0

- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key

- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature

					<ul style="list-style-type: none"> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
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AUDI					A6 [4G5, C7] Avant - A6 3.0 TDI Avant	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> </ul> </li> </ul>	

		<ul style="list-style-type: none"> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul>
	<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> </ul> </li> </ul>



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CLAB

3.0

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- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal

Underbody/Steering  
Adaptive suspension system 4.0

- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve

actuation operations

- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program

• **Actuators**

- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current, Hard
- Front right damper adjustment valve current, Soft
- Front right damper adjustment valve current, Hard
- Rear left damper adjustment valve current, Soft
- Rear left damper adjustment valve current, Hard
- Rear right damper adjustment valve current,

					Soft - Rear right damper adjustment valve current, Hard
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<b>AUDI</b>					<b>A6 [4G5, C7] Avant - A6 2.8 FSI Avant</b>	
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Year	Engine	Liters	HP	System	Functions
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
				Cruise control	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> </ul> </li> </ul>

ACC 4.1

- Radar beam 2 intensity
- Radar beam 3 intensity
- Radar beam 4 intensity
- Radar status
- Misalignment angle
- ACC lens heating actuation signal
- Radar beam 1 and 2 medium intensity
- Misalignment angle 2
- Control unit temperature
- System identification
- Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height

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CHVA

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Underbody/Steering  
Adaptive suspension system 4.0

- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle

- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left

					<ul style="list-style-type: none"> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
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AUDI					A6 [4G5, C7] Avant - A6 2.8 FSI Avant quattro	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> </ul> </li> </ul>	



- rotation angle sensor 2
- Residual acceleration sensor 2
- Power supply Clamp 30
- ABS hydraulic/return pump
- ESP brake application CAN signal
- Front left speed sensor installation position
- Front right speed sensor installation position
- Rear left speed sensor installation position
- Rear right speed sensor installation position
- Front left speed sensor direction of rotation
- Front right speed sensor direction of rotation
- Rear left speed sensor direction of rotation
- Rear right speed sensor direction of rotation
- Lateral acceleration sensor 1
- ESP button status
- Brake booster pressure actual value
- Engine control unit brake application CAN signal
- Status Handbrake
- HFM Ratio
- Yaw rate sensor 1

Cruise control  
ACC 4.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - ACC sensor adjustment
  - Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution

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- stop lights switch
- air tank pressure
- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act. current
- Rear left damper valve act. current
- Rear right damper valve spec. current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise

Underbody/Steering  
Adaptive suspension system 4.0

- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve

actuation operations

- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program

• **Actuators**

- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current, Hard
- Front right damper adjustment valve current, Soft
- Front right damper adjustment valve current, Hard
- Rear left damper adjustment valve current, Soft

					<ul style="list-style-type: none"> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
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<b>AUDI</b>	<b>A6 [4G5, C7] Avant - A6 2.0 FSI Avant</b>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> </ul> </li> </ul>

Cruise control  
ACC 4.1

- Horizontal angle deviation
- Radar beam 1 intensity
- Radar beam 2 intensity
- Radar beam 3 intensity
- Radar beam 4 intensity
- Radar status
- Misalignment angle
- ACC lens heating actuation signal
- Radar beam 1 and 2 medium intensity
- Misalignment angle 2
- Control unit temperature
- System identification
- Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select

2011/06

CDNB

2.0

180

Underbody/Steering  
Adaptive suspension system 4.0

- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys

- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation



					<ul style="list-style-type: none"> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
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AUDI					A6 [4GH, C7] Avant Allroad - A6 3.0 TDI Avant Allroad	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> </ul> </li> </ul>	

Electrohydr. brake (SBC3)

- Driving wheels angle
- Actual values selection
- rotation angle sensor 2
- Residual acceleration sensor 2
- Power supply Clamp 30
- ABS hydraulic/return pump
- ESP brake application CAN signal
- Front left speed sensor installation position
- Front right speed sensor installation position
- Rear left speed sensor installation position
- Rear right speed sensor installation position
- Front left speed sensor direction of rotation
- Front right speed sensor direction of rotation
- Rear left speed sensor direction of rotation
- Rear right speed sensor direction of rotation
- Lateral acceleration sensor 1
- ESP button status
- Brake booster pressure actual value
- Engine control unit brake application CAN signal
- Status Handbrake
- HFM Ratio
- Yaw rate sensor 1

Cruise control  
ACC 4.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - ACC sensor adjustment
  - Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**

2012/01  
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CDUD

3.0

245

- Vehicle driving speed
- Engine revolution
- stop lights switch
- air tank pressure
- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value

Underbody/Steering  
Adaptive suspension system 4.0

- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation

operations

- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program

• **Actuators**

- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current, Hard
- Front right damper adjustment valve current, Soft
- Front right damper adjustment valve current, Hard

					Hard - Rear left damper adjustment valve current, Soft - Rear left damper adjustment valve current, Hard - Rear right damper adjustment valve current, Soft - Rear right damper adjustment valve current, Hard
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AUDI A6 [4GH, C7] Avant Allroad - A6 3.0 TFSI Avant Allroad					
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Year	Engine	Liters	HP	System	Functions
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> </ul> </li> </ul>

Cruise control  
ACC 4.1

- Software version
- Vertical angle deviation
- Horizontal angle deviation
- Radar beam 1 intensity
- Radar beam 2 intensity
- Radar beam 3 intensity
- Radar beam 4 intensity
- Radar status
- Misalignment angle
- ACC lens heating actuation signal
- Radar beam 1 and 2 medium intensity
- Misalignment angle 2
- Control unit temperature
- System identification
- Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode

2012/01

CGWD

3.0

310

Underbody/Steering  
Adaptive suspension system 4.0

- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting



- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt

					<ul style="list-style-type: none"> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
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AUDI					A7 [4GA] Sportback - A7 3.0 TFSI Sportback quattro	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> </ul> </li> </ul>	

Anti-block system  
Electrohydr. brake (SBC3)

- rear left tire speed
- valve relay status
- pressure sensor
- Driving wheels angle
- Actual values selection
- rotation angle sensor 2
- Residual acceleration sensor 2
- Power supply Clamp 30
- ABS hydraulic/return pump
- ESP brake application CAN signal
- Front left speed sensor installation position
- Front right speed sensor installation position
- Rear left speed sensor installation position
- Rear right speed sensor installation position
- Front left speed sensor direction of rotation
- Front right speed sensor direction of rotation
- Rear left speed sensor direction of rotation
- Rear right speed sensor direction of rotation
- Lateral acceleration sensor 1
- ESP button status
- Brake booster pressure actual value
- Engine control unit brake application CAN signal
- Status Handbrake
- HFM Ratio
- Yaw rate sensor 1

Cruise control  
ACC 4.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - ACC sensor adjustment
  - Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up

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- Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal value
  - Rear left vehicle level sensor, PWM signal value
  - Rear right vehicle level sensor, PWM signal value
  - Compressor ambient temperature
  - Extreme level detected
  - System pressure sensor power supply
  - Left vehicle level sensor power supply
  - Right vehicle level sensor power supply
  - Solenoid valve block power supply
  - Front left damper valve current
  - Front right damper valve current
  - Rear left damper valve current
  - Rear right damper valve current
  - Front left damper PWM signal value
  - Front right damper PWM signal value
  - Rear left damper PWM signal value
  - Rear right damper PWM signal value
  - Accumulator control possible
  - Last measured value, air suspension, front left
  - Last measured value, air suspension, front right
  - Last measured value, air suspension, rear left

Underbody/Steering  
Adaptive suspension system 4.0

- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations

- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current, Hard

				<ul style="list-style-type: none"> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
			<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> </ul> </li> </ul>

Cruise control  
ACC 4.1

- Horizontal angle deviation
- Radar beam 1 intensity
- Radar beam 2 intensity
- Radar beam 3 intensity
- Radar beam 4 intensity
- Radar status
- Misalignment angle
- ACC lens heating actuation signal
- Radar beam 1 and 2 medium intensity
- Misalignment angle 2
- Control unit temperature
- System identification
- Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select



2011/01  
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CGXB

3.0

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Underbody/Steering  
Adaptive suspension system 4.0

- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys

- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation

				<ul style="list-style-type: none"> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
			<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul>
Cruise control ACC 4.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> </ul> </li> </ul>

2012/05

CTUA

3.0

310

- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED

Underbody/Steering  
Adaptive suspension system 4.0

- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations

- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current, Hard
- Front right damper adjustment valve current, Soft
- Front right damper adjustment valve current, Hard
- Rear left damper adjustment valve current, Soft
- Rear left damper adjustment valve current, Hard
- Rear right damper adjustment valve current, Soft

					<ul style="list-style-type: none"> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
				<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
				<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> </ul> </li> </ul>



- Radar beam 1 and 2 medium intensity
- Misalignment angle 2
- Control unit temperature
- System identification
- Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal

2011/11

CGWD

3.0

310

Underbody/Steering  
Adaptive suspension system 4.0

value

- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal

value

- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day

- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve

					<ul style="list-style-type: none"> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
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AUDI A7 [4GA] Sportback - A7 3.0 TDI Sportback quattro					
Year	Engine	Liters	HP	System	Functions
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul>
	<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> </ul> </li> </ul>

2010/07  
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CDUC

3.0

245

- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level

Underbody/Steering  
Adaptive suspension system 4.0

- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations

- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current, Hard
- Front right damper adjustment valve current, Soft
- Front right damper adjustment valve current, Hard
- Rear left damper adjustment valve current, Soft
- Rear left damper adjustment valve current, Hard
- Rear right damper adjustment valve current, Soft
- Rear right damper adjustment valve current, Hard



			<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
			<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> </ul> </li> </ul>

- Control unit temperature
- System identification
- Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal value
  - Rear left vehicle level sensor, PWM signal value

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Underbody/Steering  
Adaptive suspension system 4.0

- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute

- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right

				<ul style="list-style-type: none"> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
			<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul>
	<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> <li>- All doors status</li> <li>- Ventilation solenoid valve</li> <li>- Central locking status</li> <li>- Installing position sensor front left</li> <li>- Installing position sensor front right</li> <li>- Installing position sensor rear left</li> <li>- Installing position sensor rear right</li> <li>- Longitudinal acceleration</li> </ul> </li> </ul>

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- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level

Underbody/Steering  
Adaptive suspension system 4.0

- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve



					<p>actuation operations</p> <ul style="list-style-type: none"> <li>- No.of rear left additional volume valve actuation operations</li> <li>- No.of rear right additional volume valve actuation operations</li> <li>- Level control active controller</li> <li>- Level control, control requirement</li> <li>- Current lane recognition mode</li> <li>- Steering angle sensor: Direction positive/negative</li> <li>- Act. MMI setting Jack mode</li> <li>- Act. MMI setting Suspension raising</li> <li>- Act. MMI setting Trailer mode</li> <li>- Specified normal level status</li> <li>- Front left body acceleration</li> <li>- Front right body acceleration</li> <li>- Rear body acceleration</li> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
					<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Functional tests</b></p> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> <p>• <b>Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> </ul>

Anti-block system  
Electrohydr. brake (SBC3)

- Brake temperature monitoring information
- Sensor unit zero position compensation
- Reset puncture indicator
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Engine revolution
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - valve relay status
  - pressure sensor
  - Driving wheels angle
  - Actual values selection
  - rotation angle sensor 2
  - Residual acceleration sensor 2
  - Power supply Clamp 30
  - ABS hydraulic/return pump
  - ESP brake application CAN signal
  - Front left speed sensor installation position
  - Front right speed sensor installation position
  - Rear left speed sensor installation position
  - Rear right speed sensor installation position
  - Front left speed sensor direction of rotation
  - Front right speed sensor direction of rotation
  - Rear left speed sensor direction of rotation
  - Rear right speed sensor direction of rotation
  - Lateral acceleration sensor 1
  - ESP button status
  - Brake booster pressure actual value
  - Engine control unit brake application CAN signal
  - Status Handbrake
  - HFM Ratio
  - Yaw rate sensor 1

Cruise control  
ACC 4.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - ACC sensor adjustment
  - Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**

- **Adjustments / settings**

- Transfer configuration
- Adjustment of vehicle level sensors
- Activate air suspension
- Adaptation of normal level
- Wheel alignment
- Activate/deactivate shipment mode

- **Special functions**

- Pressure reduction
- Pressure accumulator, preload pressure
- Pressure build-up
- Charge air suspension struts

- **Error memory**

- **Current values**

- Vehicle driving speed
- Engine revolution
- stop lights switch
- air tank pressure
- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current

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Underbody/Steering  
Adaptive suspension system 4.0

- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value

- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
  - Button lights

					<ul style="list-style-type: none"> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
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AUDI					A7 [4GA] Sportback - A7 2.8 FSI Sportback quattro	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> </ul> </li> </ul>	

		<ul style="list-style-type: none"> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul>
	<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> <li>- All doors status</li> <li>- Ventilation solenoid valve</li> <li>- Central locking status</li> <li>- Installing position sensor front left</li> <li>- Installing position sensor front right</li> <li>- Installing position sensor rear left</li> <li>- Installing position sensor rear right</li> <li>- Longitudinal acceleration</li> <li>- System pressure</li> <li>- Power supply Clamp 15</li> <li>- Hatchback status</li> <li>- Ambient temperature</li> </ul> </li> </ul>

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- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height



Underbody/Steering  
Adaptive suspension system 4.0

- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations

					<p>operations</p> <ul style="list-style-type: none"> <li>- Level control active controller</li> <li>- Level control, control requirement</li> <li>- Current lane recognition mode</li> <li>- Steering angle sensor: Direction positive/negative</li> <li>- Act. MMI setting Jack mode</li> <li>- Act. MMI setting Suspension raising</li> <li>- Act. MMI setting Trailer mode</li> <li>- Specified normal level status</li> <li>- Front left body acceleration</li> <li>- Front right body acceleration</li> <li>- Rear body acceleration</li> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
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AUDI A7 [4GA] Sportback - A7 2.8 FSI Sportback					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> </ul>

Anti-block system  
Electrohydr. brake (SBC3)

- **Adjustments / settings**
  - Reset brake temperature monitoring
  - Brake temperature monitoring information
  - Sensor unit zero position compensation
  - Reset puncture indicator
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Engine revolution
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - valve relay status
  - pressure sensor
  - Driving wheels angle
  - Actual values selection
  - rotation angle sensor 2
  - Residual acceleration sensor 2
  - Power supply Clamp 30
  - ABS hydraulic/return pump
  - ESP brake application CAN signal
  - Front left speed sensor installation position
  - Front right speed sensor installation position
  - Rear left speed sensor installation position
  - Rear right speed sensor installation position
  - Front left speed sensor direction of rotation
  - Front right speed sensor direction of rotation
  - Rear left speed sensor direction of rotation
  - Rear right speed sensor direction of rotation
  - Lateral acceleration sensor 1
  - ESP button status
  - Brake booster pressure actual value
  - Engine control unit brake application CAN signal
  - Status Handbrake
  - HFM Ratio
  - Yaw rate sensor 1

Cruise control  
ACC 4.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - ACC sensor adjustment
  - Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal value
  - Rear left vehicle level sensor, PWM signal value
  - Rear right vehicle level sensor, PWM signal value
  - Compressor ambient temperature
  - Extreme level detected
  - System pressure sensor power supply
  - Left vehicle level sensor power supply
  - Right vehicle level sensor power supply

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Underbody/Steering  
Adaptive suspension system 4.0

- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value

- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program

					<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
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AUDI						A7 [4GA] Sportback - A7 3.0 TDI Sportback					
Year	Engine	Liters	HP	System		Functions					
				Anti-block system Electrohydr. brake (SBC3)		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> </ul> </li> </ul>					

		<ul style="list-style-type: none"> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul>
	<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> <li>- All doors status</li> <li>- Ventilation solenoid valve</li> <li>- Central locking status</li> <li>- Installing position sensor front left</li> <li>- Installing position sensor front right</li> <li>- Installing position sensor rear left</li> <li>- Installing position sensor rear right</li> <li>- Longitudinal acceleration</li> <li>- System pressure</li> <li>- Power supply Clamp 15</li> </ul> </li> </ul>



2010/11  
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CLAB

3.0

204

- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level

Underbody/Steering  
Adaptive suspension system 4.0

- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation

					<p>operations</p> <ul style="list-style-type: none"> <li>- No.of rear right additional volume valve actuation</li> </ul> <p>operations</p> <ul style="list-style-type: none"> <li>- Level control active controller</li> <li>- Level control, control requirement</li> <li>- Current lane recognition mode</li> <li>- Steering angle sensor: Direction</li> </ul> <p>positive/negative</p> <ul style="list-style-type: none"> <li>- Act. MMI setting Jack mode</li> <li>- Act. MMI setting Suspension raising</li> <li>- Act. MMI setting Trailer mode</li> <li>- Specified normal level status</li> <li>- Front left body acceleration</li> <li>- Front right body acceleration</li> <li>- Rear body acceleration</li> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
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AUDI					A8 [4H, D4] - A8 4.2 TDI quattro	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> </ul> </li> </ul>	

Anti-block system  
Electrohydr. brake (SBC3)

- Actuator test
- ESP test
- **Adjustments / settings**
  - Reset brake temperature monitoring
  - Brake temperature monitoring information
  - Sensor unit zero position compensation
  - Reset puncture indicator
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Engine revolution
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - valve relay status
  - pressure sensor
  - Driving wheels angle
  - Actual values selection
  - rotation angle sensor 2
  - Residual acceleration sensor 2
  - Power supply Clamp 30
  - ABS hydraulic/return pump
  - ESP brake application CAN signal
  - Front left speed sensor installation position
  - Front right speed sensor installation position
  - Rear left speed sensor installation position
  - Rear right speed sensor installation position
  - Front left speed sensor direction of rotation
  - Front right speed sensor direction of rotation
  - Rear left speed sensor direction of rotation
  - Rear right speed sensor direction of rotation
  - Lateral acceleration sensor 1
  - ESP button status
  - Brake booster pressure actual value
  - Engine control unit brake application CAN signal
  - Status Handbrake
  - HFM Ratio
  - Yaw rate sensor 1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Tire pressure monitor individual specified pressure adjustment
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - CAN communication
  - Supply voltage term.30
  - Tire pressure monitoring status
  - Transportation mode
  - System status
  - Inflation pressure sensor 1 Temperature
  - Inflation pressure sensor 2 Temperature
  - Inflation pressure sensor 3 Temperature
  - Inflation pressure sensor 4 Temperature
  - Inflation pressure sensor 1 Sensor code
  - Inflation pressure sensor 2 Sensor code
  - Inflation pressure sensor 3 Sensor code
  - Inflation pressure sensor 4 Sensor code
  - Radio interference
  - Load status selected
  - Warning: Check front left tire pressure
  - Warning: Check front right tire pressure
  - Tire pressure sensor 1: Actual pressure
  - Tire pressure sensor 1: Specified pressure

Tire control system  
Tire pressure monitor 4.0

- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded

loaded

- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display

2009/11 -	CDSB	4.2	351		<ul style="list-style-type: none"> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
				Cruise control ACC 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

- Vehicle driving speed
- Engine revolution
- stop lights switch
- air tank pressure
- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value



Underbody/Steering  
Adaptive suspension system 4.0

- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation

operations

- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program

• **Actuators**

- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current, Hard
- Front right damper adjustment valve current, Soft
- Front right damper adjustment valve current, Hard

					Hard - Rear left damper adjustment valve current, Soft - Rear left damper adjustment valve current, Hard - Rear right damper adjustment valve current, Soft - Rear right damper adjustment valve current, Hard
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AUDI A8 [4H, D4] - A8 4.2 FSI quattro					
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Year	Engine	Liters	HP	System	Functions
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> </ul> </li> </ul>

- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded

Tire control system  
Tire pressure monitor 4.0

- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded

2009/11 - 2012/06	CDRA	4.2	371	Cruise control ACC 4.1	<ul style="list-style-type: none"> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
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- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal value
  - Rear left vehicle level sensor, PWM signal value
  - Rear right vehicle level sensor, PWM signal value
  - Compressor ambient temperature
  - Extreme level detected
  - System pressure sensor power supply
  - Left vehicle level sensor power supply

Underbody/Steering  
Adaptive suspension system 4.0

- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode



- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode

					<ul style="list-style-type: none"> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard <ul style="list-style-type: none"> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> </ul> </li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
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AUDI					
A8 [4H, D4] - A8 3.0 TFSI quattro					
Year	Engine	Liters	HP	System	Functions
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> </ul> </li> </ul>

- ESP button status
- Brake booster pressure actual value
- Engine control unit brake application CAN signal
- Status Handbrake
- HFM Ratio
- Yaw rate sensor 1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Tire pressure monitor individual specified pressure adjustment
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - CAN communication
  - Supply voltage term.30
  - Tire pressure monitoring status
  - Transportation mode
  - System status
  - Inflation pressure sensor 1 Temperature
  - Inflation pressure sensor 2 Temperature
  - Inflation pressure sensor 3 Temperature
  - Inflation pressure sensor 4 Temperature
  - Inflation pressure sensor 1 Sensor code
  - Inflation pressure sensor 2 Sensor code
  - Inflation pressure sensor 3 Sensor code
  - Inflation pressure sensor 4 Sensor code
  - Radio interference
  - Load status selected
  - Warning: Check front left tire pressure
  - Warning: Check front right tire pressure
  - Tire pressure sensor 1: Actual pressure
  - Tire pressure sensor 1: Specified pressure
  - Tire pressure sensor 1: Wheel position
  - Tire pressure sensor 2: Actual pressure
  - Tire pressure sensor 2: Specified pressure
  - Tire pressure sensor 2: Wheel position
  - Tire pressure sensor 3: Actual pressure
  - Tire pressure sensor 3: Specified pressure
  - Tire pressure sensor 3: Wheel position
  - Designation wheel set 1
  - Designation wheel set 2
  - Designation wheel set 3
  - Designation wheel set 4
  - Designation wheel set 5
  - Designation wheel set 6
  - Designation wheel set 7
  - Designation wheel set 8
  - Designation wheel set 9
  - Designation wheel set 10
  - Currently monitored wheel set
  - Designation of currently monitored wheel set
  - Warning: Front left tire flat
  - Warning: Front right tire flat
  - Warning: Rear left tire flat
  - Warning: Rear right tire flat
  - Designation wheel set 11
  - Vehicle speed CAN message
  - CAN message voltage terminal 30
  - Tire pressure sensor: Last actual temperature received
  - Tire pressure sensor: Last actual pressure received
  - Tire pressure monitor sensor: Last wheel position received
  - Tire pressure monitor sensor: Last sensor code received

Tire control system  
Tire pressure monitor 4.0

- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle,

	<ul style="list-style-type: none"> <li>partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> </ul> </li> </ul>

2010/07 -	CGWA	3.0	290	Cruise control ACC 4.1	<ul style="list-style-type: none"> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> <li>- All doors status</li> <li>- Ventilation solenoid valve</li> <li>- Central locking status</li> <li>- Installing position sensor front left</li> <li>- Installing position sensor front right</li> <li>- Installing position sensor rear left</li> <li>- Installing position sensor rear right</li> <li>- Longitudinal acceleration</li> <li>- System pressure</li> <li>- Power supply Clamp 15</li> <li>- Hatchback status</li> <li>- Ambient temperature</li> <li>- Brake pressure</li> <li>- Basic setting status</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve spec.current</li> <li>- Transportation mode</li> <li>- System status</li> <li>- System status</li> <li>- Power supply Clamp 30</li> <li>- Diagnosis mode</li> <li>- Terminal 50 status</li> </ul> </li> </ul>	

Underbody/Steering  
Adaptive suspension system 4.0

- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode

- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function



				<ul style="list-style-type: none"> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
			<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> </ul> </li> </ul>

- Power supply Clamp 30
- ABS hydraulic/return pump
- ESP brake application CAN signal
- Front left speed sensor installation position
- Front right speed sensor installation position
- Rear left speed sensor installation position
- Rear right speed sensor installation position
- Front left speed sensor direction of rotation
- Front right speed sensor direction of rotation
- Rear left speed sensor direction of rotation
- Rear right speed sensor direction of rotation
- Lateral acceleration sensor 1
- ESP button status
- Brake booster pressure actual value
- Engine control unit brake application CAN signal
- Status Handbrake
- HFM Ratio
- Yaw rate sensor 1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Tire pressure monitor individual specified pressure adjustment
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - CAN communication
  - Supply voltage term.30
  - Tire pressure monitoring status
  - Transportation mode
  - System status
  - Inflation pressure sensor 1 Temperature
  - Inflation pressure sensor 2 Temperature
  - Inflation pressure sensor 3 Temperature
  - Inflation pressure sensor 4 Temperature
  - Inflation pressure sensor 1 Sensor code
  - Inflation pressure sensor 2 Sensor code
  - Inflation pressure sensor 3 Sensor code
  - Inflation pressure sensor 4 Sensor code
  - Radio interference
  - Load status selected
  - Warning: Check front left tire pressure
  - Warning: Check front right tire pressure
  - Tire pressure sensor 1: Actual pressure
  - Tire pressure sensor 1: Specified pressure
  - Tire pressure sensor 1: Wheel position
  - Tire pressure sensor 2: Actual pressure
  - Tire pressure sensor 2: Specified pressure
  - Tire pressure sensor 2: Wheel position
  - Tire pressure sensor 3: Actual pressure
  - Tire pressure sensor 3: Specified pressure
  - Tire pressure sensor 3: Wheel position
  - Designation wheel set 1
  - Designation wheel set 2
  - Designation wheel set 3
  - Designation wheel set 4
  - Designation wheel set 5
  - Designation wheel set 6
  - Designation wheel set 7
  - Designation wheel set 8
  - Designation wheel set 9
  - Designation wheel set 10
  - Currently monitored wheel set
  - Designation of currently monitored wheel set
  - Warning: Front left tire flat
  - Warning: Front right tire flat
  - Warning: Rear left tire flat

Tire control system  
Tire pressure monitor 4.0

- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle,

partially loaded

- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature
- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal value
  - Rear left vehicle level sensor, PWM signal value
  - Rear right vehicle level sensor, PWM signal value
  - Compressor ambient temperature
  - Extreme level detected
  - System pressure sensor power supply
  - Left vehicle level sensor power supply

Underbody/Steering  
Adaptive suspension system 4.0

- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode

- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode

				<ul style="list-style-type: none"> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
			<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>



- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Tire pressure monitor individual specified pressure adjustment
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - CAN communication
  - Supply voltage term.30
  - Tire pressure monitoring status
  - Transportation mode
  - System status
  - Inflation pressure sensor 1 Temperature
  - Inflation pressure sensor 2 Temperature
  - Inflation pressure sensor 3 Temperature
  - Inflation pressure sensor 4 Temperature
  - Inflation pressure sensor 1 Sensor code
  - Inflation pressure sensor 2 Sensor code
  - Inflation pressure sensor 3 Sensor code
  - Inflation pressure sensor 4 Sensor code
  - Radio interference
  - Load status selected
  - Warning: Check front left tire pressure
  - Warning: Check front right tire pressure
  - Tire pressure sensor 1: Actual pressure
  - Tire pressure sensor 1: Specified pressure
  - Tire pressure sensor 1: Wheel position
  - Tire pressure sensor 2: Actual pressure
  - Tire pressure sensor 2: Specified pressure
  - Tire pressure sensor 2: Wheel position
  - Tire pressure sensor 3: Actual pressure
  - Tire pressure sensor 3: Specified pressure
  - Tire pressure sensor 3: Wheel position
  - Designation wheel set 1
  - Designation wheel set 2
  - Designation wheel set 3
  - Designation wheel set 4
  - Designation wheel set 5
  - Designation wheel set 6
  - Designation wheel set 7
  - Designation wheel set 8
  - Designation wheel set 9
  - Designation wheel set 10
  - Currently monitored wheel set
  - Designation of currently monitored wheel set
  - Warning: Front left tire flat
  - Warning: Front right tire flat
  - Warning: Rear left tire flat
  - Warning: Rear right tire flat
  - Designation wheel set 11
  - Vehicle speed CAN message
  - CAN message voltage terminal 30
  - Tire pressure sensor: Last actual temperature received
  - Tire pressure sensor: Last actual pressure received
  - Tire pressure monitor sensor: Last wheel position received
  - Tire pressure monitor sensor: Last sensor code received
  - Tire pressure sensor 4: Actual pressure
  - Tire pressure sensor 4: Specified pressure
  - Tire pressure sensor 4: Wheel position
  - Wheel set 1 specified pressure, front axle, partially loaded
  - Wheel set 1 specified pressure, front axle, fully

Tire control system  
Tire pressure monitor 4.0

- loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded

2011/05 - 2012/03	CGXC	3.0	333	<p>loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> </ul> </li> </ul>				

- Engine revolution
- stop lights switch
- air tank pressure
- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value

Underbody/Steering  
Adaptive suspension system 4.0

- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations

- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current, Hard
- Front right damper adjustment valve current, Soft
- Front right damper adjustment valve current, Hard

					<ul style="list-style-type: none"> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
				<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
				<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> </ul> </li> </ul>

- Radar beam 4 intensity
- Radar status
- Misalignment angle
- ACC lens heating actuation signal
- Radar beam 1 and 2 medium intensity
- Misalignment angle 2
- Control unit temperature
- System identification
- Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height



2011/11  
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CGWD

3.0

310

Underbody/Steering  
Adaptive suspension system 4.0

- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay

- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right

					<ul style="list-style-type: none"> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
				<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul>
	<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> <li>- All doors status</li> </ul> </li> </ul>

2012/03

CTUB

3.0

333

- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode

Underbody/Steering  
Adaptive suspension system 4.0

- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation

					<p>operations</p> <ul style="list-style-type: none"> <li>- System temperature 1</li> <li>- System temperature 2</li> <li>- Vehicle identification number (VIN) monitoring</li> <li>- No.of front left additional volume valve actuation</li> </ul> <p>operations</p> <ul style="list-style-type: none"> <li>- No.of front right additional volume valve</li> </ul> <p>actuation operations</p> <ul style="list-style-type: none"> <li>- No.of rear left additional volume valve actuation</li> </ul> <p>operations</p> <ul style="list-style-type: none"> <li>- No.of rear right additional volume valve actuation</li> </ul> <p>operations</p> <ul style="list-style-type: none"> <li>- Level control active controller</li> <li>- Level control, control requirement</li> <li>- Current lane recognition mode</li> <li>- Steering angle sensor: Direction</li> </ul> <p>positive/negative</p> <ul style="list-style-type: none"> <li>- Act. MMI setting Jack mode</li> <li>- Act. MMI setting Suspension raising</li> <li>- Act. MMI setting Trailer mode</li> <li>- Specified normal level status</li> <li>- Front left body acceleration</li> <li>- Front right body acceleration</li> <li>- Rear body acceleration</li> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> </ul> </li> </ul>



- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle,

Tire control system  
Tire pressure monitor 4.0

- partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure

					<ul style="list-style-type: none"> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
2010/07 -	CDTA	3.0	250	Cruise control ACC 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> </ul> </li> </ul>

- Adaptation of normal level
- Wheel alignment
- Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal value
  - Rear left vehicle level sensor, PWM signal value
  - Rear right vehicle level sensor, PWM signal value
  - Compressor ambient temperature
  - Extreme level detected
  - System pressure sensor power supply
  - Left vehicle level sensor power supply
  - Right vehicle level sensor power supply
  - Solenoid valve block power supply
  - Front left damper valve current
  - Front right damper valve current
  - Rear left damper valve current
  - Rear right damper valve current
  - Front left damper PWM signal value

Underbody/Steering  
Adaptive suspension system 4.0

- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control

- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
  - Button lights
  - Central pressure accum., pressure discharge
  - Centr. pressure accum., charging
  - Air suspension compressor relay
  - Front left air spring valve

				<ul style="list-style-type: none"> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
			<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> </ul>

- **Error memory**

- **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle,



Tire control system  
Tire pressure monitor 4.0

- partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle,

2010/08 -	CDTB	3.0	211	<ul style="list-style-type: none"> <li>partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> </ul> </li> </ul>				

- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level

Underbody/Steering  
Adaptive suspension system 4.0

- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations

- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current, Hard
- Front right damper adjustment valve current, Soft
- Front right damper adjustment valve current, Hard
- Rear left damper adjustment valve current, Soft
- Rear left damper adjustment valve current, Hard
- Rear right damper adjustment valve current, Soft
- Rear right damper adjustment valve current, Hard

			<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> </ul> </li> </ul>

- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded

Tire control system  
Tire pressure monitor 4.0

- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low



2011/09  
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CLAB

3.0

204

- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature
- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear

- Front left damper valve act. current
- Front right damper valve act.current
- Rear damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation

Underbody/Steering  
Adaptive suspension system 4.0

- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction

				<p>positive/negative</p> <ul style="list-style-type: none"> <li>- Act. MMI setting Jack mode</li> <li>- Act. MMI setting Suspension raising</li> <li>- Act. MMI setting Trailer mode</li> <li>- Specified normal level status</li> <li>- Front left body acceleration</li> <li>- Front right body acceleration</li> <li>- Rear body acceleration</li> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
				<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Functional tests</b></p> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> <p>• <b>Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> <p>• <b>Special functions</b></p> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Engine revolution</li> </ul>

Anti-block system  
Electrohydr. brake (SBC3)

- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- valve relay status
- pressure sensor
- Driving wheels angle
- Actual values selection
- rotation angle sensor 2
- Residual acceleration sensor 2
- Power supply Clamp 30
- ABS hydraulic/return pump
- ESP brake application CAN signal
- Front left speed sensor installation position
- Front right speed sensor installation position
- Rear left speed sensor installation position
- Rear right speed sensor installation position
- Front left speed sensor direction of rotation
- Front right speed sensor direction of rotation
- Rear left speed sensor direction of rotation
- Rear right speed sensor direction of rotation
- Lateral acceleration sensor 1
- ESP button status
- Brake booster pressure actual value
- Engine control unit brake application CAN signal
- Status Handbrake
- HFM Ratio
- Yaw rate sensor 1

Cruise control  
ACC 4.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - ACC sensor adjustment
  - Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification
  - Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**

- Pressure reduction
- Pressure accumulator, preload pressure
- Pressure build-up
- Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal value
  - Rear left vehicle level sensor, PWM signal value
  - Rear right vehicle level sensor, PWM signal value
  - Compressor ambient temperature
  - Extreme level detected
  - System pressure sensor power supply
  - Left vehicle level sensor power supply
  - Right vehicle level sensor power supply
  - Solenoid valve block power supply
  - Front left damper valve current
  - Front right damper valve current
  - Rear left damper valve current
  - Rear right damper valve current
  - Front left damper PWM signal value
  - Front right damper PWM signal value
  - Rear left damper PWM signal value
  - Rear right damper PWM signal value
  - Accumulator control possible

Underbody/Steering  
Adaptive suspension system 4.0

- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status

- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
  - Button lights
  - Central pressure accum., pressure discharge
  - Centr. pressure accum., charging
  - Air suspension compressor relay
  - Front left air spring valve
  - Front right air spring valve
  - Rear left air spring valve
  - Rear right air spring valve
  - Damper adjustment valve current



					<ul style="list-style-type: none"> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
				<p>Anti-block system Electrohydr. brake (SBC3)</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> </ul> </li> </ul>

Cruise control  
ACC 4.1

- Power supply Clamp 15
- Software version
- Vertical angle deviation
- Horizontal angle deviation
- Radar beam 1 intensity
- Radar beam 2 intensity
- Radar beam 3 intensity
- Radar beam 4 intensity
- Radar status
- Misalignment angle
- ACC lens heating actuation signal
- Radar beam 1 and 2 medium intensity
- Misalignment angle 2
- Control unit temperature
- System identification
- Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30

2012/03  
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CMHA

3.0

250

Underbody/Steering  
Adaptive suspension system 4.0

- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right

- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration

					<ul style="list-style-type: none"> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
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AUDI					A8 [4H, D4] - A8 6.3 FSI quattro	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> </ul> </li> </ul>	

Anti-block system  
Electrohydr. brake (SBC3)

- rear left tire speed
- valve relay status
- pressure sensor
- Driving wheels angle
- Actual values selection
- rotation angle sensor 2
- Residual acceleration sensor 2
- Power supply Clamp 30
- ABS hydraulic/return pump
- ESP brake application CAN signal
- Front left speed sensor installation position
- Front right speed sensor installation position
- Rear left speed sensor installation position
- Rear right speed sensor installation position
- Front left speed sensor direction of rotation
- Front right speed sensor direction of rotation
- Rear left speed sensor direction of rotation
- Rear right speed sensor direction of rotation
- Lateral acceleration sensor 1
- ESP button status
- Brake booster pressure actual value
- Engine control unit brake application CAN signal
- Status Handbrake
- HFM Ratio
- Yaw rate sensor 1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Tire pressure monitor individual specified pressure adjustment
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - CAN communication
  - Supply voltage term.30
  - Tire pressure monitoring status
  - Transportation mode
  - System status
  - Inflation pressure sensor 1 Temperature
  - Inflation pressure sensor 2 Temperature
  - Inflation pressure sensor 3 Temperature
  - Inflation pressure sensor 4 Temperature
  - Inflation pressure sensor 1 Sensor code
  - Inflation pressure sensor 2 Sensor code
  - Inflation pressure sensor 3 Sensor code
  - Inflation pressure sensor 4 Sensor code
  - Radio interference
  - Load status selected
  - Warning: Check front left tire pressure
  - Warning: Check front right tire pressure
  - Tire pressure sensor 1: Actual pressure
  - Tire pressure sensor 1: Specified pressure
  - Tire pressure sensor 1: Wheel position
  - Tire pressure sensor 2: Actual pressure
  - Tire pressure sensor 2: Specified pressure
  - Tire pressure sensor 2: Wheel position
  - Tire pressure sensor 3: Actual pressure
  - Tire pressure sensor 3: Specified pressure
  - Tire pressure sensor 3: Wheel position
  - Designation wheel set 1
  - Designation wheel set 2
  - Designation wheel set 3
  - Designation wheel set 4
  - Designation wheel set 5
  - Designation wheel set 6
  - Designation wheel set 7
  - Designation wheel set 8

Tire control system  
Tire pressure monitor 4.0

- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded

- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure



2011/01	CEJA	6.3	500		<ul style="list-style-type: none"> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
				Cruise control ACC 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> <li>- All doors status</li> <li>- Ventilation solenoid valve</li> <li>- Central locking status</li> <li>- Installing position sensor front left</li> <li>- Installing position sensor front right</li> <li>- Installing position sensor rear left</li> <li>- Installing position sensor rear right</li> <li>- Longitudinal acceleration</li> </ul> </li> </ul>

- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level

Underbody/Steering  
Adaptive suspension system 4.0

- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve

					<p>actuation operations</p> <ul style="list-style-type: none"> <li>- No.of rear left additional volume valve actuation operations</li> <li>- No.of rear right additional volume valve actuation operations</li> <li>- Level control active controller</li> <li>- Level control, control requirement</li> <li>- Current lane recognition mode</li> <li>- Steering angle sensor: Direction positive/negative</li> <li>- Act. MMI setting Jack mode</li> <li>- Act. MMI setting Suspension raising</li> <li>- Act. MMI setting Trailer mode</li> <li>- Specified normal level status</li> <li>- Front left body acceleration</li> <li>- Front right body acceleration</li> <li>- Rear body acceleration</li> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
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AUDI					A8 [4H, D4] - A8 2.0 TFSI Hybrid	
Year	Engine	Liters	HP	System	Functions	
					• Identification	

Anti-block system  
Electrohydr. brake (SBC3)

- **Clear errors**
- **Functional tests**
  - Pulse-wheel test
  - Actuator test
  - ESP test
- **Adjustments / settings**
  - Reset brake temperature monitoring
  - Brake temperature monitoring information
  - Sensor unit zero position compensation
  - Reset puncture indicator
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Engine revolution
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - valve relay status
  - pressure sensor
  - Driving wheels angle
  - Actual values selection
  - rotation angle sensor 2
  - Residual acceleration sensor 2
  - Power supply Clamp 30
  - ABS hydraulic/return pump
  - ESP brake application CAN signal
  - Front left speed sensor installation position
  - Front right speed sensor installation position
  - Rear left speed sensor installation position
  - Rear right speed sensor installation position
  - Front left speed sensor direction of rotation
  - Front right speed sensor direction of rotation
  - Rear left speed sensor direction of rotation
  - Rear right speed sensor direction of rotation
  - Lateral acceleration sensor 1
  - ESP button status
  - Brake booster pressure actual value
  - Engine control unit brake application CAN signal
  - Status Handbrake
  - HFM Ratio
  - Yaw rate sensor 1

Cruise control  
ACC 4.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - ACC sensor adjustment
  - Basic adjustment
- **Error memory**
- **Current values**
  - Calculated vehicle speed
  - Power supply Clamp 15
  - Software version
  - Vertical angle deviation
  - Horizontal angle deviation
  - Radar beam 1 intensity
  - Radar beam 2 intensity
  - Radar beam 3 intensity
  - Radar beam 4 intensity
  - Radar status
  - Misalignment angle
  - ACC lens heating actuation signal
  - Radar beam 1 and 2 medium intensity
  - Misalignment angle 2
  - Control unit temperature
  - System identification

- Calculated vehicle acceleration

• **Actuators**

- Lens heating actuation
- ACC lens adjustment

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Transfer configuration
- Adjustment of vehicle level sensors
- Activate air suspension
- Adaptation of normal level
- Wheel alignment
- Activate/deactivate shipment mode

• **Special functions**

- Pressure reduction
- Pressure accumulator, preload pressure
- Pressure build-up
- Charge air suspension struts

• **Error memory**

• **Current values**

- Vehicle driving speed
- Engine revolution
- stop lights switch
- air tank pressure
- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value

2012/02

CHJA

2.0

211

Underbody/Steering  
Adaptive suspension system 4.0

- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year

- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right



					<ul style="list-style-type: none"> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
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AUDI					
A8 [4H, D4] - A8 4.0 FSI quattro					
Year	Engine	Liters	HP	System	Functions
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul>
	<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> <li>- All doors status</li> <li>- Ventilation solenoid valve</li> <li>- Central locking status</li> <li>- Installing position sensor front left</li> <li>- Installing position sensor front right</li> </ul> </li> </ul>

2012/05

CEUA

4.0

420

- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve

Underbody/Steering  
Adaptive suspension system 4.0

- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring

					<ul style="list-style-type: none"> <li>- No.of front left additional volume valve actuation operations</li> <li>- No.of front right additional volume valve actuation operations</li> <li>- No.of rear left additional volume valve actuation operations</li> <li>- No.of rear right additional volume valve actuation operations</li> <li>- Level control active controller</li> <li>- Level control, control requirement</li> <li>- Current lane recognition mode</li> <li>- Steering angle sensor: Direction positive/negative</li> <li>- Act. MMI setting Jack mode</li> <li>- Act. MMI setting Suspension raising</li> <li>- Act. MMI setting Trailer mode</li> <li>- Specified normal level status</li> <li>- Front left body acceleration</li> <li>- Front right body acceleration</li> <li>- Rear body acceleration</li> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
				Cruise control ACC 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> </ul> </li> </ul>

- Misalignment angle 2
- Control unit temperature
- System identification
- Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal value

value

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CRDB

4.0

560

Underbody/Steering  
Adaptive suspension system 4.0

- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour



- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left

					<ul style="list-style-type: none"> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
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AUDI					S3 [8V1] - S3 2.0 TFSI quattro	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> </ul> </li> </ul>	

				<p data-bbox="499 1630 687 1686">Airbag Airbag AB 20 UDS</p>	<ul style="list-style-type: none"> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front pass. side:Ohm value</li> <li>- Driver side front belt force limiter ign.circuit: Ohm value</li> <li>- Passenger side front belt force limiter ign.circuit: Ohm value</li> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> </ul>
2012/11 -	CJXC	2.0	301		

					<ul style="list-style-type: none"> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>2</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>2</li> <li><b>• Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
					<b>• Identification</b>

- **Clear errors**
- **Error memory**
- **Current values**
  - Data registration
  - Seat occupation detection
  - Power supply Clamp 15
  - Key switch position
  - Ignition circuit windowbag driver's side
  - Ignition circuit windowbag front passenger's side
  - Seat allocation detection front passenger side
- front
  - Ignition circuit 1 Front airbag driver side
  - Ignition circuit 1 Front airbag front passenger side
- side
  - Pass. side knee airbag, ign. circuit
  - Ignition circuit knee bag driver's side front
  - Ignition circuit side airbag driver side front
  - Ignition circuit side airbag front passenger side
- front
  - Ignition circuit pretensioner driver side front
  - Ignition circuit pretensioner front passenger side
- front
  - Seat belt lock switch driver seat front
  - Seat belt lock switch front passenger seat
  - Ignition circuit 2 Front airbag driver side
  - Ignition circuit 2 Front airbag front passenger side
- side
  - Ignition circuit seat belt strength limiter front driver's side
  - Ignition circuit seat belt strength limiter front passenger's side
  - Driver side pedestrian protection ign.circuit resistance
  - Passenger side pedestrian protection ign.circuit resistance
  - Resistance key switch, contact 1
  - Resistance key switch, contact 2
  - Driver side front airbag ignition circuit 2: Ohm value
  - Passenger side front airbag ignition circuit 2: Ohm value
  - Driver side front side airbag ignition circuit: Ohm value
  - Passenger side front side airbag ignition circuit: Ohm value
  - Driver side rear side airbag ignition circuit: Ohm value
  - Passenger side rear side airbag ignition circuit: Ohm value
  - Driver side windowbag ignition circuit: Ohm value
  - Passenger side windowbag ignition circuit: Ohm value
  - Driver side front kneebag ignition circuit: Ohm value
  - Passenger side front kneebag ignition circuit: Ohm value
  - Driver side front belt tensioner ign.circuit: Ohm value
  - Passenger side front belt tensioner ign.circuit: Ohm value
  - Ignition circuit 2,belt tensioner,front driver side:Ohm value
  - Ignition circuit 2,belt tensioner,front pass. side:Ohm value
  - Driver side front belt force limiter ign.circuit: Ohm value
  - Passenger side front belt force limiter ign.circuit:

2013/02 -	CJXB	2.0	280	Airbag Airbag AB 20 UDS	<p>Ohm value</p> <ul style="list-style-type: none"> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm</li> </ul>
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					<p>value</p> <ul style="list-style-type: none"> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1:</li> </ul> <p>Ohm value</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> </ul> <p>2</p> <ul style="list-style-type: none"> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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AUDI					S6 [4G2, C7] - S6 4.0 TFSI quattro	
Year	Engine	Liters	HP	System	Functions	
				Cruise control ACC 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> </ul> </li> </ul>	

- Adaptation of normal level
- Wheel alignment
- Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal value
  - Rear left vehicle level sensor, PWM signal value
  - Rear right vehicle level sensor, PWM signal value
  - Compressor ambient temperature
  - Extreme level detected
  - System pressure sensor power supply
  - Left vehicle level sensor power supply
  - Right vehicle level sensor power supply
  - Solenoid valve block power supply
  - Front left damper valve current
  - Front right damper valve current
  - Rear left damper valve current
  - Rear right damper valve current
  - Front left damper PWM signal value



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Underbody/Steering  
Adaptive suspension system 4.0

- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control

- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
  - Button lights
  - Central pressure accum., pressure discharge
  - Centr. pressure accum., charging
  - Air suspension compressor relay
  - Front left air spring valve

					<ul style="list-style-type: none"> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
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<b>AUDI</b>	<b>S6 [4G5, C7] Avant - S6 4.0 TFSI Avant quattro</b>
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Year	Engine	Liters	HP	System	Functions
				Cruise control ACC 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

- Vehicle driving speed
- Engine revolution
- stop lights switch
- air tank pressure
- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act. current
- Rear left damper valve act. current
- Rear right damper valve spec. current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value

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4.0

420

Underbody/Steering  
Adaptive suspension system 4.0

- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation

operations

- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program

• **Actuators**

- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current, Hard
- Front right damper adjustment valve current, Soft
- Front right damper adjustment valve current, Hard

					Hard - Rear left damper adjustment valve current, Soft - Rear left damper adjustment valve current, Hard - Rear right damper adjustment valve current, Soft - Rear right damper adjustment valve current, Hard
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**AUDI S8 [4H, D4] - S8 4.0 FSI quattro**

Year	Engine	Liters	HP	System	Functions
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Pulse-wheel test</li> <li>- Actuator test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Reset brake temperature monitoring</li> <li>- Brake temperature monitoring information</li> <li>- Sensor unit zero position compensation</li> <li>- Reset puncture indicator</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- valve relay status</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- Actual values selection</li> <li>- rotation angle sensor 2</li> <li>- Residual acceleration sensor 2</li> <li>- Power supply Clamp 30</li> <li>- ABS hydraulic/return pump</li> <li>- ESP brake application CAN signal</li> <li>- Front left speed sensor installation position</li> <li>- Front right speed sensor installation position</li> <li>- Rear left speed sensor installation position</li> <li>- Rear right speed sensor installation position</li> <li>- Front left speed sensor direction of rotation</li> <li>- Front right speed sensor direction of rotation</li> <li>- Rear left speed sensor direction of rotation</li> <li>- Rear right speed sensor direction of rotation</li> <li>- Lateral acceleration sensor 1</li> <li>- ESP button status</li> <li>- Brake booster pressure actual value</li> <li>- Engine control unit brake application CAN signal</li> <li>- Status Handbrake</li> <li>- HFM Ratio</li> <li>- Yaw rate sensor 1</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> </ul> </li> </ul>

Cruise control  
ACC 4.1

- Software version
- Vertical angle deviation
- Horizontal angle deviation
- Radar beam 1 intensity
- Radar beam 2 intensity
- Radar beam 3 intensity
- Radar beam 4 intensity
- Radar status
- Misalignment angle
- ACC lens heating actuation signal
- Radar beam 1 and 2 medium intensity
- Misalignment angle 2
- Control unit temperature
- System identification
- Calculated vehicle acceleration
- **Actuators**
  - Lens heating actuation
  - ACC lens adjustment

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Transfer configuration
  - Adjustment of vehicle level sensors
  - Activate air suspension
  - Adaptation of normal level
  - Wheel alignment
  - Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode



2012/04

CGTA

4.0

520

Underbody/Steering  
Adaptive suspension system 4.0

- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting

- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt

- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
  - Button lights
  - Central pressure accum., pressure discharge
  - Centr. pressure accum., charging
  - Air suspension compressor relay
  - Front left air spring valve
  - Front right air spring valve
  - Rear left air spring valve
  - Rear right air spring valve
  - Damper adjustment valve current
  - Front left damper adjustment valve current, Soft
  - Front left damper adjustment valve current, Hard
  - Front right damper adjustment valve current, Soft
  - Front right damper adjustment valve current, Hard
  - Rear left damper adjustment valve current, Soft
  - Rear left damper adjustment valve current, Hard
  - Rear right damper adjustment valve current, Soft
  - Rear right damper adjustment valve current, Hard

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[3 \[E 46\] - 320 i](#)  
[3 \[E 46\] - 320 d](#)  
[3 \[E 46\] - 316 i](#)  
[3 \[E 46\] - 330 d](#)  
[3 \[E 46\] - 330 i](#)  
[3 \[E 46\] - 325 i](#)  
[3 \[E 46\] - 330 xd](#)  
[3 \[E 46\] - 330 xi](#)  
[3 \[E 46\] - 325 xi](#)  
[3 \[E 46\] - 318 d](#)  
[3 \[E 46\] - 323 i](#)  
[3 \[E 46\] - 318 i A](#)  
[3 \[E 46\] Cabrio - 323 Ci Cabrio](#)  
[3 \[E 46\] Cabrio - 330 Ci Cabrio](#)  
[3 \[E 46\] Cabrio - 320 Ci Cabrio](#)  
[3 \[E 46\] Cabrio - 325 Ci Cabrio](#)  
[3 \[E 46\] Cabrio - M 3 Cabrio](#)  
[3 \[E 46\] Cabrio - 318 Ci Cabrio](#)  
[3 \[E 46\] Cabrio - 320 Cd Cabrio](#)  
[3 \[E 46\] Cabrio - 330 Cd Cabrio](#)  
[3 \[E 46\] Compact - 316 ti Compact](#)  
[3 \[E 46\] Compact - 325 ti Compact](#)  
[3 \[E 46\] Compact - 318 ti Compact](#)  
[3 \[E 46\] Compact - 320 td Compact](#)  
[3 \[E 46\] Compact - 318 td Compact](#)  
[3 \[E 46\] Coupe - 323 Ci Coupe](#)  
[3 \[E 46\] Coupe - 328 Ci Coupe](#)  
[3 \[E 46\] Coupe - 320 Ci Coupe](#)  
[3 \[E 46\] Coupe - 318 Ci Coupe](#)  
[3 \[E 46\] Coupe - 316 Ci Coupe](#)  
[3 \[E 46\] Coupe - M 3 Coupe](#)  
[3 \[E 46\] Coupe - 330 Ci Coupe](#)  
[3 \[E 46\] Coupe - 325 Ci Coupe](#)  
[3 \[E 46\] Coupe - 330 Cd Coupe](#)  
[3 \[E 46\] Coupe - M 3 CSL Coupe](#)  
[3 \[E 46\] Coupe - 320 Cd Coupe](#)  
[3 \[E 46\] Touring - 320 i Touring](#)  
[3 \[E 46\] Touring - 320 d Touring](#)  
[3 \[E 46\] Touring - 318 i Touring](#)  
[3 \[E 46\] Touring - 328 i Touring](#)  
[3 \[E 46\] Touring - 330 d Touring](#)  
[3 \[E 46\] Touring - 330 i Touring](#)  
[3 \[E 46\] Touring - 325 i Touring](#)  
[3 \[E 46\] Touring - 323 i Touring](#)  
[3 \[E 46\] Touring - 330 xd Touring](#)

[3 \[E 46\] Touring - 330 xi Touring](#)  
[3 \[E 46\] Touring - 325 xi Touring](#)  
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[5 \[E 39\] - 520 i](#)  
[5 \[E 39\] - 523 i](#)  
[5 \[E 39\] - 528 i](#)  
[5 \[E 39\] - 525 td](#)  
[5 \[E 39\] - 540 i](#)  
[5 \[E 39\] - 535 i](#)  
[5 \[E 39\] - 525 tds](#)  
[5 \[E 39\] - M 5](#)  
[5 \[E 39\] - 530 d](#)  
[5 \[E 39\] - 520 d](#)  
[5 \[E 39\] - 525 d](#)  
[5 \[E 39\] - 525 i](#)  
[5 \[E 39\] - 530 i](#)  
[5 \[E 39\] Touring - 528 i Touring](#)  
[5 \[E 39\] Touring - 520 i Touring](#)  
[5 \[E 39\] Touring - 523 i Touring](#)  
[5 \[E 39\] Touring - 525 tds Touring](#)  
[5 \[E 39\] Touring - 540 i Touring](#)  
[5 \[E 39\] Touring - 530 d Touring](#)  
[5 \[E 39\] Touring - 520 d Touring](#)  
[5 \[E 39\] Touring - 525 d Touring](#)  
[5 \[E 39\] Touring - 530 i Touring](#)  
[5 \[E 39\] Touring - 525 i Touring](#)  
[X 3 \[E 83\] - X 3 2.5 i](#)  
[X 3 \[E 83\] - X 3 3.0 i](#)  
[X 3 \[E 83\] - X 3 3.0 d](#)  
[X 3 \[E 83\] - X 3 2.0 d](#)  
[X 3 \[E 83\] - X 3 2.0 i](#)  
[X 3 \[E 83\] - X 3 2.5 si](#)  
[X 3 \[E 83\] - X 3 3.0 si](#)  
[X 3 \[E 83\] - X 3 3.0 sd](#)  
[X 3 \[E 83\] - X 3 xDrive 30 d](#)  
[X 5 \[E 53\] - X 5 3.0 i](#)  
[X 5 \[E 53\] - X 5 4.4 i](#)  
[X 5 \[E 53\] - X 5 3.0 d](#)  
[X 5 \[E 53\] - X 5 4.6 is](#)  
[X 5 \[E 53\] - X 5 4.8 is](#)  
[Z 4 \[E 85\] - Z 4 2.5 i](#)  
[Z 4 \[E 85\] - Z 4 3.0 i](#)  
[Z 4 \[E 85\] - Z 4 2.2 i](#)  
[Z 4 \[E 85\] - Z 4 2.0 i](#)  
[Z 4 \[E 85\] - Z 4 2.5 si](#)  
[Z 4 \[E 85\] - Z 4 3.0 si](#)  
[Z 4 \[E 85\] - Z 4 M 3.2](#)

[Z 4 \[E 86\] Coupe - Z 4 M 3.2 Coupe](#)

[Z 4 \[E 86\] Coupe - Z 4 3.0 si Coupe](#)

Year	Engine	Liters	HP	System	Functions
1998/04 - 2001/09	19 4E 1	1.9	118	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
1998/11 - 2001/09	19 4E 1	1.9	118	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
2001/09 - 2004/03	N42 B20A	2.0	143	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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**BMW** **3 [E 46] - 320 i**

Year	Engine	Liters	HP	System	Functions
1998/04 - 2001/09	20 6S 4	2.0	150	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
2000/09 - 2005/03	22 6S 1	2.2	163 - 170	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
3 [E 46] - 320 d					
Year	Engine	Liters	HP	System	Functions
1998/04 - 2001/09	20 4D 1	2.0	136	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> </ul>

					<ul style="list-style-type: none"> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
2001/09 - 2005/03	20 4D 4	2.0	150	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
3 [E 46] - 316 i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> </ul>

1998/04 - 2002/09	19 4E 1	1.9	105	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					3 [E 46] - 330 d	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> </ul>	

1999/10 - 2003/04	30 6D 1	3.0	184	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					3 [E 46] - 330 i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> </ul> </li> </ul>	



2000/05 - 2005/04	30 6S 3	3.0	231	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					3 [E 46] - 325 i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> </ul>	

<p>2000/09 - 2005/03</p>	<p>25 6S 5</p>	<p>2.5</p>	<p>192</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> </ul>

2002/09 - 2004/12	25 6S 6	2.5	187	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					3 [E 46] - 330 xd	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> </ul>	

<p>2000/07 - 2003/03</p>	<p>30 6D 1</p>	<p>3.0</p>	<p>184</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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Year	Engine	Liters	HP	System	Functions
2000/07 - 2005/03	30 6S 3	3.0	231	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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**BMW** **3 [E 46] - 325 xi**

Year	Engine	Liters	HP	System	Functions
2000/09 - 2005/03	25 6S 5	2.5	192	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
3 [E 46] - 318 d					
Year	Engine	Liters	HP	System	Functions
2001/09 - 2003/03	20 4D 1	2.0	116	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
3 [E 46] - 323 i					
Year	Engine	Liters	HP	System	Functions
1999/03 - 2003/12	24 6S 3	2.4	184	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> </ul>



					<ul style="list-style-type: none"> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					3 [E 46] - 318 i A	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> </ul>	

2001/10 -	M43TU	1.9	120	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					
3 [E 46] Cabrio - 323 Ci Cabrio					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> </ul> </li> </ul>

2000/03 - 2000/09	25 6S 4	2.5	170	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					
3 [E 46] Cabrio - 330 Ci Cabrio					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> </ul> </li> </ul>

2000/05 - 2006/08	30 6S 3	3.0	231	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW						3 [E 46] Cabrio - 320 Ci Cabrio	
Year	Engine	Liters	HP	System	Functions		
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> </ul> </li> </ul>		

2000/09 - 2006/08	22 6S 1	2.2	163 - 170	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW						3 [E 46] Cabrio - 325 Ci Cabrio	
Year	Engine	Liters	HP	System	Functions		
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> </ul>		

2000/09 - 2006/08	25 6S 5	2.5	192	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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Year	Engine	Liters	HP	System	Functions
2001/04 - 2006/08	32 6S 4	3.2	343	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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<b>BMW</b>	<b>3 [E 46] Cabrio - 318 Ci Cabrio</b>
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Year	Engine	Liters	HP	System	Functions
2001/09 - 2004/03	N42 B20A	2.0	143	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
2004/04 - 2006/08	N46 B20...	2.0	143 - 150	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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**BMW 3 [E 46] Cabrio - 320 Cd Cabrio**

Year	Engine	Liters	HP	System	Functions
2005/01 - 2006/08	20 4D 4	2.0	150	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
3 [E 46] Cabrio - 330 Cd Cabrio					
Year	Engine	Liters	HP	System	Functions
2005/04 - 2006/08	30 6D 2	3.0	204	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> </ul>

					<ul style="list-style-type: none"> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
3 [E 46] Compact - 316 ti Compact					
Year	Engine	Liters	HP	System	Functions
2001/06 -	N42 B18A	1.8	116	Central electronics	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> </ul>

2004/03

Central electronics 1.0

- El.window switch rear right
- Pinching protection, front left
- Pinching protection, front right
- Pinching protection, rear left
- Pinching protection, rear right
- El.windows central lock
- Door locking cylinder, left
- Door locking cylinder, right
- Rear window switch with handle
- Rear door locking
- Interior lighting
- Interior lighting, switch
- Rear left el.windowlifter switch
- Rear right el.windowlifter switch

• **Actuators**

- windscreen washing pump
- Rear window washing pump
- Wipe cleaners el.motor, stage 1
- Wipe cleaners el.motor, stage 2
- Horn relay
- front left el. window lifter open
- front left el. window lifter closed
- front rear el. window lifter open
- front rear el. window lifter closed
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Doors locking
- Doors unlocking
- Trunk unlocking
- Interior lighting
- Alarm system LED
- Turn off the electrical loads

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Vehicle driving speed
- Switch
- Anti-theft unit
- Terminal 30
- Collision signal
- Loads switch off
- Child safety system switch
- Rear top opening switch
- Rear top unlocking switch
- Left front door
- Right front door
- Central locking switch, interior
- Terminal 15R
- Tank filler door, unlocking switch
- Left-rear door
- Right rear door
- Trunk top
- Motor top
- Movable rear window
- Windshield washing switch
- Wipe cleaners switch
- Windshield washing pump, terminal 30
- El.windows, terminal 30
- Central locking, terminal 30
- Rear top locking, terminal 30
- Interior lighting, terminal 30
- Wiper cleaners interval switch
- Lights cleaning
- El.window switch front left

2002/03 - 2004/03	N40 B16A	1.6	116	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> </ul>

2004/04 - 2004/12	N45 B16A	1.6	116	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					
3 [E 46] Compact - 325 ti Compact					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> </ul> </li> </ul>

2001/06 - 2004/12	25 6S 5	2.5	192	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
3 [E 46] Compact - 318 ti Compact					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> </ul> </li> </ul>



<p>2001/09 - 2004/03</p>	<p>N42 B20A</p>	<p>2.0</p>	<p>143</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> </ul> </li> </ul>

2004/04 - 2004/12	N46 B20...	2.0	143	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW						3 [E 46] Compact - 320 td Compact	
Year	Engine	Liters	HP	System	Functions		
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> </ul> </li> </ul>		

2001/09 - 2004/12	20 4D 4	2.0	150	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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**BMW**

**3 [E 46] Compact - 318 td Compact**

Year	Engine	Liters	HP	System	Functions
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2003/03  
-  
2004/12

20 4D 4

2.0

116

Central electronics  
Central electronics 1.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Switch
  - Anti-theft unit
  - Terminal 30
  - Collision signal
  - Loads switch off
  - Child safety system switch
  - Rear top opening switch
  - Rear top unlocking switch
  - Left front door
  - Right front door
  - Central locking switch, interior
  - Terminal 15R
  - Tank filler door, unlocking switch
  - Left-rear door
  - Right rear door
  - Trunk top
  - Motor top
  - Movable rear window
  - Windshield washing switch
  - Wipe cleaners switch
  - Windshield washing pump, terminal 30
  - El.windows, terminal 30
  - Central locking, terminal 30
  - Rear top locking, terminal 30
  - Interior lighting, terminal 30
  - Wiper cleaners interval switch
  - Lights cleaning
  - El.window switch front left
  - El.window switch front right
  - El.window switch rear left
  - El.window switch rear right
  - Pinching protection, front left
  - Pinching protection, front right
  - Pinching protection, rear left
  - Pinching protection, rear right
  - El.windows central lock
  - Door locking cylinder, left
  - Door locking cylinder, right
  - Rear window switch with handle
  - Rear door locking
  - Interior lighting
  - Interior lighting, switch
  - Rear left el.windowlifter switch
  - Rear right el.windowlifter switch
- **Actuators**
  - windscreen washing pump
  - Rear window washing pump
  - Wipe cleaners el.motor, stage 1
  - Wipe cleaners el.motor, stage 2
  - Horn relay
  - front left el. window lifter open
  - front left el. window lifter closed
  - front rear el. window lifter open
  - front rear el. window lifter closed
  - rear left el. window lifter open
  - rear left el. window lifter closed
  - rear right el. window lifter open
  - rear right el. window lifter closed
  - Doors locking
  - Doors unlocking
  - Trunk unlocking
  - Interior lighting
  - Alarm system LED

- Turn off the electrical loads

BMW					
3 [E 46] Coupe - 323 Ci Coupe					
Year	Engine	Liters	HP	System	Functions
1998/04 - 2000/09	25 6S 4	2.5	170	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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<b>BMW</b>	<b>3 [E 46] Coupe - 328 Ci Coupe</b>
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Year	Engine	Liters	HP	System	Functions
1998/04 - 2000/09	28 6S 2	2.8	193	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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**BMW 3 [E 46] Coupe - 320 Ci Coupe**

Year	Engine	Liters	HP	System	Functions
1998/04 - 2001/09	20 6S 4	2.0	150	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
2000/09 - 2006/05	22 6S 1	2.2	163 - 170	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					3 [E 46] Coupe - 318 Ci Coupe	
Year	Engine	Liters	HP	System	Functions	
1999/04 - 2001/09	19 4E 1	1.9	118	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> </ul>	

					<ul style="list-style-type: none"> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
2001/09 - 2004/03	N42 B20A	2.0	143	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
2004/04			143	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> </ul>

- 2006/05	N46 B20...	2.0	- 150	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					
3 [E 46] Coupe - 316 Ci Coupe					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> </ul> </li> </ul>

<p>1999/10 - 2002/09</p>	<p>16 4E 3</p>	<p>1.6</p>	<p>102</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> </ul> </li> </ul>

2002/03 - 2004/03	N40 B16A	1.6	116	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> </ul> </li> </ul>

2004/04 - 2006/05	N45 B16A	1.6	116	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					3 [E 46] Coupe - M 3 Coupe	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> </ul>	

2000/09 - 2006/05	32 6S 4	3.2	343	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					
3 [E 46] Coupe - 330 Ci Coupe					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> </ul> </li> </ul>



2000/05 - 2006/05	30 6S 3	3.0	231	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW				3 [E 46] Coupe - 325 Ci Coupe	
Year	Engine	Liters	HP	System	Functions
					• Identification

2000/09  
-  
2006/05

25 6S 5

2.5

192

Central electronics  
Central electronics 1.0

- **Clear errors**
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Switch
  - Anti-theft unit
  - Terminal 30
  - Collision signal
  - Loads switch off
  - Child safety system switch
  - Rear top opening switch
  - Rear top unlocking switch
  - Left front door
  - Right front door
  - Central locking switch, interior
  - Terminal 15R
  - Tank filler door, unlocking switch
  - Left-rear door
  - Right rear door
  - Trunk top
  - Motor top
  - Movable rear window
  - Windshield washing switch
  - Wipe cleaners switch
  - Windshield washing pump, terminal 30
  - El.windows, terminal 30
  - Central locking, terminal 30
  - Rear top locking, terminal 30
  - Interior lighting, terminal 30
  - Wiper cleaners interval switch
  - Lights cleaning
  - El.window switch front left
  - El.window switch front right
  - El.window switch rear left
  - El.window switch rear right
  - Pinching protection, front left
  - Pinching protection, front right
  - Pinching protection, rear left
  - Pinching protection, rear right
  - El.windows central lock
  - Door locking cylinder, left
  - Door locking cylinder, right
  - Rear window switch with handle
  - Rear door locking
  - Interior lighting
  - Interior lighting, switch
  - Rear left el.windowlifter switch
  - Rear right el.windowlifter switch
- **Actuators**
  - windscreen washing pump
  - Rear window washing pump
  - Wipe cleaners el.motor, stage 1
  - Wipe cleaners el.motor, stage 2
  - Horn relay
  - front left el. window lifter open
  - front left el. window lifter closed
  - front rear el. window lifter open
  - front rear el. window lifter closed
  - rear left el. window lifter open
  - rear left el. window lifter closed
  - rear right el. window lifter open
  - rear right el. window lifter closed
  - Doors locking
  - Doors unlocking
  - Trunk unlocking
  - Interior lighting
  - Alarm system LED
  - Turn off the electrical loads

<p>2002/09 - 2006/05</p>	<p>25 6S 6</p>	<p>2.5</p>	<p>187</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> </ul> </li> </ul>
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- Alarm system LED
- Turn off the electrical loads

BMW					
3 [E 46] Coupe - 330 Cd Coupe					
Year	Engine	Liters	HP	System	Functions
2003/03 - 2006/05	30 6D 2	3.0	204	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
3 [E 46] Coupe - M 3 CSL Coupe					
Year	Engine	Liters	HP	System	Functions
2003/03 - 2003/12	32 6S 4	3.2	360	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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**BMW 3 [E 46] Coupe - 320 Cd Coupe**

Year	Engine	Liters	HP	System	Functions
2003/09 - 2006/05	20 4D 4	2.0	150	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					
3 [E 46] Touring - 320 i Touring					
Year	Engine	Liters	HP	System	Functions
1999/10 - 2001/09	20 6S 4	2.0	150	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
2000/09 - 2005/09	22 6S 1	2.2	163 - 170	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					3 [E 46] Touring - 320 d Touring	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> </ul>	

<p>1999/10 - 2001/09</p>	<p>20 4D 1</p>	<p>2.0</p>	<p>136</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> </ul> </li> </ul>

2001/09 - 2005/09	20 4D 4	2.0	150	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					3 [E 46] Touring - 318 i Touring	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> </ul> </li> </ul>	

<p>1999/10 - 2001/09</p>	<p>19 4E 1</p>	<p>1.9</p>	<p>118</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> </ul>

<p>2001/09 - 2004/03</p>	<p>N42 B20A</p>	<p>2.0</p>	<p>143</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> </ul>

2004/04 - 2005/03	N46 B20...	2.0	143	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					3 [E 46] Touring - 328 i Touring	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> </ul> </li> </ul>	

1999/10 - 2000/09	28 6S 2	2.8	193	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW 3 [E 46] Touring - 330 d Touring					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> </ul>

1999/10  
-  
2003/03

30 6D 1

3.0

184

Central electronics  
Central electronics 1.0

• **Error memory**

• **Current values**

- Vehicle driving speed
- Switch
- Anti-theft unit
- Terminal 30
- Collision signal
- Loads switch off
- Child safety system switch
- Rear top opening switch
- Rear top unlocking switch
- Left front door
- Right front door
- Central locking switch, interior
- Terminal 15R
- Tank filler door, unlocking switch
- Left-rear door
- Right rear door
- Trunk top
- Motor top
- Movable rear window
- Windshield washing switch
- Wipe cleaners switch
- Windshield washing pump, terminal 30
- El.windows, terminal 30
- Central locking, terminal 30
- Rear top locking, terminal 30
- Interior lighting, terminal 30
- Wiper cleaners interval switch
- Lights cleaning
- El.window switch front left
- El.window switch front right
- El.window switch rear left
- El.window switch rear right
- Pinching protection, front left
- Pinching protection, front right
- Pinching protection, rear left
- Pinching protection, rear right
- El.windows central lock
- Door locking cylinder, left
- Door locking cylinder, right
- Rear window switch with handle
- Rear door locking
- Interior lighting
- Interior lighting, switch
- Rear left el.windowlifter switch
- Rear right el.windowlifter switch

• **Actuators**

- windscreen washing pump
- Rear window washing pump
- Wipe cleaners el.motor, stage 1
- Wipe cleaners el.motor, stage 2
- Horn relay
- front left el. window lifter open
- front left el. window lifter closed
- front rear el. window lifter open
- front rear el. window lifter closed
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Doors locking
- Doors unlocking
- Trunk unlocking
- Interior lighting
- Alarm system LED
- Turn off the electrical loads



2003/03  
-  
2005/09

30 6D 2

3.0

204

Central electronics  
Central electronics 1.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Switch
  - Anti-theft unit
  - Terminal 30
  - Collision signal
  - Loads switch off
  - Child safety system switch
  - Rear top opening switch
  - Rear top unlocking switch
  - Left front door
  - Right front door
  - Central locking switch, interior
  - Terminal 15R
  - Tank filler door, unlocking switch
  - Left-rear door
  - Right rear door
  - Trunk top
  - Motor top
  - Movable rear window
  - Windshield washing switch
  - Wipe cleaners switch
  - Windshield washing pump, terminal 30
  - El.windows, terminal 30
  - Central locking, terminal 30
  - Rear top locking, terminal 30
  - Interior lighting, terminal 30
  - Wiper cleaners interval switch
  - Lights cleaning
  - El.window switch front left
  - El.window switch front right
  - El.window switch rear left
  - El.window switch rear right
  - Pinching protection, front left
  - Pinching protection, front right
  - Pinching protection, rear left
  - Pinching protection, rear right
  - El.windows central lock
  - Door locking cylinder, left
  - Door locking cylinder, right
  - Rear window switch with handle
  - Rear door locking
  - Interior lighting
  - Interior lighting, switch
  - Rear left el.windowlifter switch
  - Rear right el.windowlifter switch
- **Actuators**
  - windscreen washing pump
  - Rear window washing pump
  - Wipe cleaners el.motor, stage 1
  - Wipe cleaners el.motor, stage 2
  - Horn relay
  - front left el. window lifter open
  - front left el. window lifter closed
  - front rear el. window lifter open
  - front rear el. window lifter closed
  - rear left el. window lifter open
  - rear left el. window lifter closed
  - rear right el. window lifter open
  - rear right el. window lifter closed
  - Doors locking
  - Doors unlocking
  - Trunk unlocking
  - Interior lighting
  - Alarm system LED

- Turn off the electrical loads

BMW					
3 [E 46] Touring - 330 i Touring					
Year	Engine	Liters	HP	System	Functions
2000/05 - 2005/09	30 6S 3	3.0	231	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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**BMW 3 [E 46] Touring - 325 i Touring**

Year	Engine	Liters	HP	System	Functions
2000/09 - 2005/09	25 6S 5	2.5	192	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
2002/09 - 2005/01	25 6S 6	2.5	187	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
3 [E 46] Touring - 323 i Touring					
Year	Engine	Liters	HP	System	Functions
1998/10 - 2000/09	25 6S 4	2.5	170	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
3 [E 46] Touring - 330 xd Touring					
Year	Engine	Liters	HP	System	Functions
2000/07 - 2003/03	30 6D 1	3.0	184	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> </ul>

					<ul style="list-style-type: none"> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
2003/03 - 2005/09	30 6D 2	3.0	204	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
3 [E 46] Touring - 330 xi Touring					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> </ul>



2000/07 - 2005/09	30 6S 3	3.0	231	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
3 [E 46] Touring - 325 xi Touring					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> </ul>

2000/09 - 2005/09	25 6S 5	2.5	192	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW						3 [E 46] Touring - 316 i Touring	
Year	Engine	Liters	HP	System	Functions		
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> </ul>		

<p>2002/03 - 2004/03</p>	<p>N42 B18A</p>	<p>1.8</p>	<p>116</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> </ul> </li> </ul>

2004/04 - 2005/09	N46 B18A	1.8	116	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW						3 [E 46] Touring - 318 d Touring	
Year	Engine	Liters	HP	System	Functions		
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> </ul> </li> </ul>		

2002/03 - 2003/03	20 4D 1	2.0	116	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

<p>2003/03 - 2005/09</p>	<p>20 4D 4</p>	<p>2.0</p>	<p>116</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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Year	Engine	Liters	HP	System	Functions
1995/09 - 2003/06	20 6S 3/4	2.0	136 - 150	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
2000/09 - 2003/07	22 6S 1	2.2	163 - 170	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
5 [E 39] - 523 i					
Year	Engine	Liters	HP	System	Functions
1995/09 - 2000/09	25 6S 3/4	2.5	170	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
1998/09 - 2000/08	25 6S 4	2.5	170	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
1997/03 - 1998/09	24 6S 2	2.4	190	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

					<ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
1999/03 - 2002/12	24 6S 3	2.4	184	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW						5 [E 39] - 528 i					
Year	Engine	Liters	HP	System		Functions					
1995/09 - 2012/11	28 6S 1/2	2.8	193	Central electronics Central electronics 1.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> </ul>					

					<ul style="list-style-type: none"> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
1996/06 - 1998/09	28 6S 1	2.8	193	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
1998/09 - 2000/01	28 6S 2	2.8	193	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					5 [E 39] - 525 td	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> </ul>	



1997/01 - 2000/09	25 6T 1	2.5	116	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					5 [E 39] - 540 i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> </ul>	

1996/01 - 2003/07	44 8S 1/2	4.4	286	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					
5 [E 39] - 535 i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> </ul> </li> </ul>

1996/01 - 2003/07	35 8S 1/2	3.5	235 - 245	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					5 [E 39] - 525 tds	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> </ul> </li> </ul>	

1996/01 - 2000/09	25 6T 1	2.5	143	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW 5 [E 39] - M 5					
Year	Engine	Liters	HP	System	Functions
					• Identification

1998/10  
-  
2003/07

50 8S 1

5.0

400

Central electronics  
Central electronics 1.0

- **Clear errors**
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Switch
  - Anti-theft unit
  - Terminal 30
  - Collision signal
  - Loads switch off
  - Child safety system switch
  - Rear top opening switch
  - Rear top unlocking switch
  - Left front door
  - Right front door
  - Central locking switch, interior
  - Terminal 15R
  - Tank filler door, unlocking switch
  - Left-rear door
  - Right rear door
  - Trunk top
  - Motor top
  - Movable rear window
  - Windshield washing switch
  - Wipe cleaners switch
  - Windshield washing pump, terminal 30
  - El.windows, terminal 30
  - Central locking, terminal 30
  - Rear top locking, terminal 30
  - Interior lighting, terminal 30
  - Wiper cleaners interval switch
  - Lights cleaning
  - El.window switch front left
  - El.window switch front right
  - El.window switch rear left
  - El.window switch rear right
  - Pinching protection, front left
  - Pinching protection, front right
  - Pinching protection, rear left
  - Pinching protection, rear right
  - El.windows central lock
  - Door locking cylinder, left
  - Door locking cylinder, right
  - Rear window switch with handle
  - Rear door locking
  - Interior lighting
  - Interior lighting, switch
  - Rear left el.windowlifter switch
  - Rear right el.windowlifter switch
- **Actuators**
  - windscreen washing pump
  - Rear window washing pump
  - Wipe cleaners el.motor, stage 1
  - Wipe cleaners el.motor, stage 2
  - Horn relay
  - front left el. window lifter open
  - front left el. window lifter closed
  - front rear el. window lifter open
  - front rear el. window lifter closed
  - rear left el. window lifter open
  - rear left el. window lifter closed
  - rear right el. window lifter open
  - rear right el. window lifter closed
  - Doors locking
  - Doors unlocking
  - Trunk unlocking
  - Interior lighting
  - Alarm system LED
  - Turn off the electrical loads

<p>1999/01 - 2002/12</p>	<p>50 8S 1</p>	<p>5.0</p>	<p>400</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> </ul> </li> </ul>
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- Alarm system LED
- Turn off the electrical loads

BMW					5 [E 39] - 530 d	
Year	Engine	Liters	HP	System	Functions	
1998/08 - 2003/07	30 6D 1	3.0	184 - 193	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
5 [E 39] - 520 d					
Year	Engine	Liters	HP	System	Functions
2000/04 - 2003/07	20 4D 1	2.0	136	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
5 [E 39] - 525 d					
Year	Engine	Liters	HP	System	Functions
2000/04 - 2003/07	25 6D 1	2.5	163	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					
5 [E 39] - 525 i					
Year	Engine	Liters	HP	System	Functions
2000/09 - 2003/07	25 6S 5	2.5	192	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
5 [E 39] - 530 i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> </ul>

2000/09 - 2003/07	30 6S 3	3.0	231	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					5 [E 39] Touring - 528 i Touring	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> </ul>	

1997/01 - 2000/09	28 6S 1/2	2.8	193	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					5 [E 39] Touring - 520 i Touring	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> </ul> </li> </ul>	

<p>1996/12 - 2001/12</p>	<p>20 6S 3/4</p>	<p>2.0</p>	<p>136 - 150</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> </ul> </li> </ul>

2000/09 - 2004/05	22 6S 1	2.2	163 - 170	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW						5 [E 39] Touring - 523 i Touring					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> </ul> </li> </ul>					

1997/01 - 2000/09	25 6S 3/4	2.5	170	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					5 [E 39] Touring - 525 tds Touring	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> </ul>	



<p>1997/03 - 2000/09</p>	<p>25 6T 1</p>	<p>2.5</p>	<p>143</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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Year	Engine	Liters	HP	System	Functions
1997/03 - 2004/05	44 8S 1/2	4.4	286	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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**BMW 5 [E 39] Touring - 530 d Touring**

Year	Engine	Liters	HP	System	Functions
1998/08 - 2004/05	30 6D 1	3.0	184 - 193	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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<b>BMW</b>	<b>5 [E 39] Touring - 520 d Touring</b>
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Year	Engine	Liters	HP	System	Functions
2000/04 - 2003/07	20 4D 1	2.0	136	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
5 [E 39] Touring - 525 d Touring					
Year	Engine	Liters	HP	System	Functions
2000/04 - 2004/05	25 6D 1	2.5	163	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> </ul>

					<ul style="list-style-type: none"> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
5 [E 39] Touring - 530 i Touring					
Year	Engine	Liters	HP	System	Functions
2000/09					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> </ul>

- 2004/05	30 6S 3	3.0	231	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					
5 [E 39] Touring - 525 i Touring					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> </ul> </li> </ul>

2000/09 - 2004/05	25 6S 5	2.5	192	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					X 3 [E 83] - X 3 2.5 i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> </ul> </li> </ul>	



2004/03 - 2006/08	25 6S 5	2.5	192	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					X 3 [E 83] - X 3 3.0 i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> </ul>	

<p>2004/01 - 2006/08</p>	<p>30 6S 3</p>	<p>3.0</p>	<p>231</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> </ul>

2006/09 - 2008/08	N52 B30A	3.0	218	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW X 3 [E 83] - X 3 3.0 d					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values</li> </ul>

<p>2004/01 - 2005/09</p>	<p>30 6D 2</p>	<p>3.0</p>	<p>204</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> </ul> </li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

<p>2005/09 - 2008/08</p>	<p>30 6D 3</p>	<p>3.0</p>	<p>218</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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Year	Engine	Liters	HP	System	Functions
2004/10 - 2007/09	20 4D 4	2.0	150	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
2007/09 - 2008/08	N47 D20A	2.0	177	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
X 3 [E 83] - X 3 2.0 i					
Year	Engine	Liters	HP	System	Functions
2005/09 - 2008/08	N46 B20B	2.0	150	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					X 3 [E 83] - X 3 2.5 si	
Year	Engine	Liters	HP	System	Functions	
2006/09 - 2008/08	N52 B25...	2.5	218	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> </ul>	

					<ul style="list-style-type: none"> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					X 3 [E 83] - X 3 3.0 si	
Year	Engine	Liters	HP	System	Functions	
2006/09 - 2008/08	N52 B30...	3.0	272	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> </ul>	

					<ul style="list-style-type: none"> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					X 3 [E 83] - X 3 3.0 sd	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> </ul>	

2006/09 - 2008/08	30 6D 5	3.0	286	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					
X 3 [E 83] - X 3 xDrive 30 d					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> </ul> </li> </ul>

2008/09 - 2010/08	30 6D 3	3.0	211 - 218	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					X 5 [E 53] - X 5 3.0 i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> </ul> </li> </ul>	

1999/10 - 2006/09	30 6S 3	3.0	231	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					X 5 [E 53] - X 5 4.4 i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> </ul> </li> </ul>	

<p>1999/03 - 2003/09</p>	<p>44 8S 2</p>	<p>4.4</p>	<p>286</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> </ul>

2003/10 - 2006/10	N62 B44A	4.4	320	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b></li> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW X 5 [E 53] - X 5 3.0 d					
Year	Engine	Liters	HP	System	Functions
					• Identification



2001/03  
-  
2003/09

30 6D 1

3.0

184

Central electronics  
Central electronics 1.0

- **Clear errors**
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Switch
  - Anti-theft unit
  - Terminal 30
  - Collision signal
  - Loads switch off
  - Child safety system switch
  - Rear top opening switch
  - Rear top unlocking switch
  - Left front door
  - Right front door
  - Central locking switch, interior
  - Terminal 15R
  - Tank filler door, unlocking switch
  - Left-rear door
  - Right rear door
  - Trunk top
  - Motor top
  - Movable rear window
  - Windshield washing switch
  - Wipe cleaners switch
  - Windshield washing pump, terminal 30
  - El.windows, terminal 30
  - Central locking, terminal 30
  - Rear top locking, terminal 30
  - Interior lighting, terminal 30
  - Wiper cleaners interval switch
  - Lights cleaning
  - El.window switch front left
  - El.window switch front right
  - El.window switch rear left
  - El.window switch rear right
  - Pinching protection, front left
  - Pinching protection, front right
  - Pinching protection, rear left
  - Pinching protection, rear right
  - El.windows central lock
  - Door locking cylinder, left
  - Door locking cylinder, right
  - Rear window switch with handle
  - Rear door locking
  - Interior lighting
  - Interior lighting, switch
  - Rear left el.windowlifter switch
  - Rear right el.windowlifter switch
- **Actuators**
  - windscreen washing pump
  - Rear window washing pump
  - Wipe cleaners el.motor, stage 1
  - Wipe cleaners el.motor, stage 2
  - Horn relay
  - front left el. window lifter open
  - front left el. window lifter closed
  - front rear el. window lifter open
  - front rear el. window lifter closed
  - rear left el. window lifter open
  - rear left el. window lifter closed
  - rear right el. window lifter open
  - rear right el. window lifter closed
  - Doors locking
  - Doors unlocking
  - Trunk unlocking
  - Interior lighting
  - Alarm system LED
  - Turn off the electrical loads

<p>2003/10 - 2006/10</p>	<p>30 6D 2</p>	<p>3.0</p>	<p>211 - 218</p>	<p>Central electronics Central electronics 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> </ul> </li> </ul>
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- Alarm system LED
- Turn off the electrical loads

BMW					X 5 [E 53] - X 5 4.6 is	
Year	Engine	Liters	HP	System	Functions	
2002/02 - 2003/09	46 8S 1	4.6	347	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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BMW					
X 5 [E 53] - X 5 4.8 is					
Year	Engine	Liters	HP	System	Functions
2004/03 - 2006/10	N62 B48A	4.8	360	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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<b>BMW</b>	<b>Z 4 [E 85] - Z 4 2.5 i</b>
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Year	Engine	Liters	HP	System	Functions
2002/10 - 2006/01	25 6S 5	2.5	192	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
2006/02 - 2009/02	N52 B25...	2.5	177	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					
Z 4 [E 85] - Z 4 3.0 i					
Year	Engine	Liters	HP	System	Functions
2002/10 - 2006/01	30 6S 3	3.0	231	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>	
2006/02	-	N52 B30A	3.0	218	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>Central electronics</li> <li>Central electronics 1.0</li> </ul>



2008/08					<ul style="list-style-type: none"> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					Z 4 [E 85] - Z 4 2.2 i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> </ul> </li> </ul>	

2003/10 - 2005/11	22 6S 1	2.2	170	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					Z 4 [E 85] - Z 4 2.0 i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> </ul> </li> </ul>	

2005/03 - 2009/03	N46 B20...	2.0	150	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW					Z 4 [E 85] - Z 4 2.5 si	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> </ul> </li> </ul>	

2006/02 - 2009/03	N52 B25...	2.5	218	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW						Z 4 [E 85] - Z 4 3.0 si	
Year	Engine	Liters	HP	System	Functions		
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> </ul> </li> </ul>		

2006/02 - 2008/08	N52 B30...	3.0	265	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul> </li> </ul>
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BMW

Z 4 [E 85] - Z 4 M 3.2

Year	Engine	Liters	HP	System	Functions
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2006/02  
-  
2008/08

32 6S 4

3.2

343

Central electronics  
Central electronics 1.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Vehicle driving speed
- Switch
- Anti-theft unit
- Terminal 30
- Collision signal
- Loads switch off
- Child safety system switch
- Rear top opening switch
- Rear top unlocking switch
- Left front door
- Right front door
- Central locking switch, interior
- Terminal 15R
- Tank filler door, unlocking switch
- Left-rear door
- Right rear door
- Trunk top
- Motor top
- Movable rear window
- Windshield washing switch
- Wipe cleaners switch
- Windshield washing pump, terminal 30
- El.windows, terminal 30
- Central locking, terminal 30
- Rear top locking, terminal 30
- Interior lighting, terminal 30
- Wiper cleaners interval switch
- Lights cleaning
- El.window switch front left
- El.window switch front right
- El.window switch rear left
- El.window switch rear right
- Pinching protection, front left
- Pinching protection, front right
- Pinching protection, rear left
- Pinching protection, rear right
- El.windows central lock
- Door locking cylinder, left
- Door locking cylinder, right
- Rear window switch with handle
- Rear door locking
- Interior lighting
- Interior lighting, switch
- Rear left el.windowlifter switch
- Rear right el.windowlifter switch

• **Actuators**

- windscreen washing pump
- Rear window washing pump
- Wipe cleaners el.motor, stage 1
- Wipe cleaners el.motor, stage 2
- Horn relay
- front left el. window lifter open
- front left el. window lifter closed
- front rear el. window lifter open
- front rear el. window lifter closed
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Doors locking
- Doors unlocking
- Trunk unlocking
- Interior lighting
- Alarm system LED

- Turn off the electrical loads

BMW					
Z 4 [E 86] Coupe - Z 4 M 3.2 Coupe					
Year	Engine	Liters	HP	System	Functions
2006/03 - 2008/08	32 6S 4	3.2	343	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> <li>- Horn relay</li> <li>- front left el. window lifter open</li> <li>- front left el. window lifter closed</li> <li>- front rear el. window lifter open</li> <li>- front rear el. window lifter closed</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Doors locking</li> <li>- Doors unlocking</li> <li>- Trunk unlocking</li> <li>- Interior lighting</li> <li>- Alarm system LED</li> <li>- Turn off the electrical loads</li> </ul>
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**BMW Z 4 [E 86] Coupe - Z 4 3.0 si Coupe**

Year	Engine	Liters	HP	System	Functions
2006/03 - 2008/08	N52 B30...	3.0	265	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Switch</li> <li>- Anti-theft unit</li> <li>- Terminal 30</li> <li>- Collision signal</li> <li>- Loads switch off</li> <li>- Child safety system switch</li> <li>- Rear top opening switch</li> <li>- Rear top unlocking switch</li> <li>- Left front door</li> <li>- Right front door</li> <li>- Central locking switch, interior</li> <li>- Terminal 15R</li> <li>- Tank filler door, unlocking switch</li> <li>- Left-rear door</li> <li>- Right rear door</li> <li>- Trunk top</li> <li>- Motor top</li> <li>- Movable rear window</li> <li>- Windshield washing switch</li> <li>- Wipe cleaners switch</li> <li>- Windshield washing pump, terminal 30</li> <li>- El.windows, terminal 30</li> <li>- Central locking, terminal 30</li> <li>- Rear top locking, terminal 30</li> <li>- Interior lighting, terminal 30</li> <li>- Wiper cleaners interval switch</li> <li>- Lights cleaning</li> <li>- El.window switch front left</li> <li>- El.window switch front right</li> <li>- El.window switch rear left</li> <li>- El.window switch rear right</li> <li>- Pinching protection, front left</li> <li>- Pinching protection, front right</li> <li>- Pinching protection, rear left</li> <li>- Pinching protection, rear right</li> <li>- El.windows central lock</li> <li>- Door locking cylinder, left</li> <li>- Door locking cylinder, right</li> <li>- Rear window switch with handle</li> <li>- Rear door locking</li> <li>- Interior lighting</li> <li>- Interior lighting, switch</li> <li>- Rear left el.windowlifter switch</li> <li>- Rear right el.windowlifter switch</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washing pump</li> <li>- Wipe cleaners el.motor, stage 1</li> <li>- Wipe cleaners el.motor, stage 2</li> </ul> </li> </ul>



- |  |  |  |  |  |   |
|--|--|--|--|--|---|
|  |  |  |  |  | <ul style="list-style-type: none"><li>- Horn relay</li><li>- front left el. window lifter open</li><li>- front left el. window lifter closed</li><li>- front rear el. window lifter open</li><li>- front rear el. window lifter closed</li><li>- rear left el. window lifter open</li><li>- rear left el. window lifter closed</li><li>- rear right el. window lifter open</li><li>- rear right el. window lifter closed</li><li>- Doors locking</li><li>- Doors unlocking</li><li>- Trunk unlocking</li><li>- Interior lighting</li><li>- Alarm system LED</li><li>- Turn off the electrical loads</li></ul> |
|--|--|--|--|--|---|

[Impala - Impala 5.4](#)

Year	Engine	Liters	HP	System	Functions
1961/09 - 1971/12		5.4	275	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air consumption meter</li> <li>- Vehicle driving speed</li> <li>- Air conditioner switching command</li> <li>- throttle valve position</li> <li>- Fuel pump relay</li> <li>- Coolant temperature</li> <li>- Air mass meter voltage</li> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- detonations control (detonation combustion)</li> <li>- Engine revolution</li> <li>- injection duration</li> <li>- Ignition angle</li> <li>- Exhausted gases recirculation</li> <li>- recommended idle revolutions</li> <li>- Mixture adaptation</li> <li>- Immobilizer</li> <li>- Air conditioner pressure sensor</li> <li>- system power supply</li> <li>- Main relay</li> <li>- Car speed sensor</li> <li>- Radiator fan. stage 1</li> <li>- Radiator fan. stage 2</li> <li>- Service lamp</li> <li>- Clutch switch</li> <li>- Intake air temperature</li> <li>- Exhausted gases signal lamp</li> <li>- Ignition</li> <li>- Oxygen sensor voltage (bank 1-sensor 1)</li> <li>- Oxygen sensor voltage (bank 1-sensor 2)</li> <li>- Lambda-control status (bank 1, sensor 1) 1)</li> <li>- Acceleration pedal position sensor 1</li> <li>- Acceleration pedal position sensor 2</li> <li>- EGR valve actual position</li> <li>- Fuel/air mixture 1</li> <li>- Fuel/air mixture 2</li> <li>- Throttle valve memo value</li> <li>- Oil pressure</li> <li>- Mixture adaptation, idle</li> <li>- Driving speed control</li> <li>- Fuel fill level signal</li> <li>- Fuel feeding stop</li> <li>- Throttle valve/pedal sensor A position</li> <li>- Throttle valve/pedal sensor B position</li> <li>- Catalyst protection enrichment (B1)</li> <li>- Full load enrichment</li> <li>- Throttle valve position, Duty cycle</li> <li>- Air conditioner pressure sensor voltage</li> <li>- Throttle valve A, saved idle speed position</li> <li>- Swirl flap position sensor</li> <li>- Oil life</li> <li>- Oil change warning</li> <li>- Ventilation valve combustion tank</li> <li>- Air compressor switch off</li> <li>- Oxygen sensor bank 1, sensor 1)</li> <li>- Oxygen sensor bank 1, sensor 2)</li> <li>- Calculated gas pedal position</li> <li>- Gas pedal idle position</li> <li>- Calculated throttle flap position</li> </ul> </li> </ul>

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|--|--|--|--|--|---|
|  |  |  |  |  | <ul style="list-style-type: none"><li>- Cooling agent temperature voltage</li><li>- Intake air temperature voltage</li><li>- Stop light switch 1</li><li>- Stop light switch 2</li><li>- Button speed control</li><li>- Driving speed range control</li><li>- Radiator fan speed 3:</li><li>- Vehicle acceleration</li><li>- Security holding time</li><li>- Cylinder 1 knock sensor ZW correction</li><li>- Cylinder 2 knock sensor ZW correction</li><li>- Cylinder 3 knock sensor ZW correction</li><li>- Cylinder 4 knock sensor ZW correction</li><li>- E-Gas fail safe</li><li>• <b>Adjustment</b><ul style="list-style-type: none"><li>- Throttle valve adaption</li><li>- Idle running speed programing</li><li>- Lambda control adaptation</li></ul></li></ul> |
|--|--|--|--|--|---|

[Berlingo \[M59\] - Berlingo 1.1i](#)  
[Berlingo \[M59\] - Berlingo 1.4i](#)  
[Berlingo \[M59\] - Berlingo 1.6i 16V](#)  
[Berlingo \[M59\] - Berlingo 1.9 Diesel](#)  
[Berlingo \[M59\] - Berlingo 2.0 HDi](#)  
[Berlingo \[M59\] - Berlingo 1.6 HDi](#)  
[C-Crosser \[I4\] - C-Crosser 2.2 HDi 4x4](#)  
[C5 \[X4\] - C5 2.2 HDi](#)  
[C5 \[X4\] - C5 2.0 HDi](#)  
[C5 \[X4\] Break - C5 2.0 HDi Break](#)  
[C5 \[X4\] Break - C5 2.2 HDi Break](#)  
[C5 \[X7\] - C5 3.0 HDi 24V](#)  
[C5 \[X7\] Tourer - C5 3.0 HDi 24V Tourer](#)  
[C6 \[X6\] - C6 3.0 HDi 24V](#)  
[C8 \[V3\] - C8 2.0 HDi](#)  
[C8 \[V3\] - C8 2.2 HDi](#)  
[Evasion \[U60\] - Evasion 1.9 Diesel Turbo](#)  
[Evasion \[U60\] - Evasion 2.1 Diesel Turbo](#)  
[Evasion \[U60\] - Evasion 2.0 HDi](#)  
[Jumper - Jumper 2.8 HDI](#)  
[Jumper - Jumper 2.3 HDI](#)  
[Jumper \[U9\] - Jumper 2.2 HDi](#)  
[Jumper \[U9\] - Jumper 3.0 HDi](#)  
[Jumpy \[G9\] - Jumpy 2.0 HDi](#)  
[Jumpy \[G9\] - Jumpy 1.6 HDi](#)  
[Jumpy \[U64\] - Jumpy 1.9 Diesel Turbo](#)  
[Jumpy \[U64\] - Jumpy 1.9 Diesel](#)  
[Jumpy \[U64\] - Jumpy 1.6i](#)  
[Jumpy \[U64\] - Jumpy 2.0 HDi](#)  
[Jumpy \[U64\] - Jumpy 2.0i](#)  
[Nemo \[A9\] - Nemo 1.4 HDi](#)  
[Nemo \[A9\] - Nemo 1.4](#)  
[Nemo \[A9\] - Nemo 1.3 HDi](#)  
[Xantia \[X2\] - Xantia 2.0 HDi](#)  
[Xantia \[X2\] - Xantia 3.0i](#)  
[Xantia \[X2\] - Xantia 1.8i](#)  
[Xantia \[X2\] - Xantia 1.8i 16V](#)  
[Xantia \[X2\] - Xantia 2.0i Turbo](#)  
[Xantia \[X2\] - Xantia 2.0i](#)  
[Xantia \[X2\] - Xantia 2.0i 16V](#)  
[Xantia \[X2\] - Xantia 1.9 Diesel Turbo](#)  
[Xantia \[X2\] - Xantia 2.1 Diesel Turbo](#)  
[Xantia \[X2\] - Xantia 1.6i](#)  
[Xantia \[X2\] Break - Xantia 3.0i Break](#)  
[Xantia \[X2\] Break - Xantia 2.0 HDi Break](#)  
[Xantia \[X2\] Break - Xantia 1.8i Break](#)

[Xantia \[X2\] Break - Xantia 1.8i 16V Break](#)  
[Xantia \[X2\] Break - Xantia 2.0i Turbo Break](#)  
[Xantia \[X2\] Break - Xantia 2.0i 16V Break](#)  
[Xantia \[X2\] Break - Xantia 1.9 Diesel Turbo Break](#)  
[Xantia \[X2\] Break - Xantia 2.1 Diesel Turbo Break](#)  
[Xsara Picasso \[N68\] - Xsara Picasso 2.0 HDi](#)  
[Xsara Picasso \[N68\] - Xsara Picasso 1.6 HDi](#)  
[Xsara \[N6\] - Xsara 1.4i](#)  
[Xsara \[N6\] - Xsara 1.6i](#)  
[Xsara \[N6\] - Xsara 1.8i](#)  
[Xsara \[N6\] - Xsara 1.8i 16V](#)  
[Xsara \[N6\] - Xsara 2.0i 16V](#)  
[Xsara \[N6\] - Xsara 1.9 Diesel](#)  
[Xsara \[N6\] - Xsara 1.9 Diesel Turbo](#)  
[Xsara \[N6\] - Xsara 1.5 Diesel](#)  
[Xsara \[N6\] - Xsara 1.8 Diesel](#)  
[Xsara \[N6\] - Xsara 2.0 HDi](#)  
[Xsara \[N6\] Break - Xsara 1.8 Diesel Break](#)  
[Xsara \[N6\] Break - Xsara 1.4i Break](#)  
[Xsara \[N6\] Break - Xsara 1.8i Break](#)  
[Xsara \[N6\] Break - Xsara 1.8i 16V Break](#)  
[Xsara \[N6\] Break - Xsara 1.9 Diesel Break](#)  
[Xsara \[N6\] Break - Xsara 1.9 Diesel Turbo Break](#)  
[Xsara \[N6\] Break - Xsara 2.0i 16V Break](#)  
[Xsara \[N6\] Break - Xsara 1.5 Diesel Break](#)  
[Xsara \[N6\] Break - Xsara 1.6i Break](#)  
[Xsara \[N6\] Break - Xsara 2.0 HDi Break](#)  
[Xsara \[N6\] Coupe - Xsara 2.0 HDi Coupe](#)  
[Xsara \[N6\] Coupe - Xsara 1.4i Coupe](#)  
[Xsara \[N6\] Coupe - Xsara 1.8i Coupe](#)  
[Xsara \[N6\] Coupe - Xsara 1.8i 16V Coupe](#)  
[Xsara \[N6\] Coupe - Xsara 2.0i 16V Coupe](#)  
[Xsara \[N6\] Coupe - Xsara 1.8 Diesel Coupe](#)  
[Xsara \[N6\] Coupe - Xsara 1.9 Diesel Coupe](#)  
[Xsara \[N6\] Coupe - Xsara 1.9 Diesel Turbo Coupe](#)

CITROEN				Berlingo [M59] - Berlingo 1.1i	
Year	Engine	Liters	HP	System	Functions
2002/11 - 2008/04	HFX	1.1	60	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN				Berlingo [M59] - Berlingo 1.4i	
Year	Engine	Liters	HP	System	Functions
2002/11 - 2010/03	KFW	1.4	75	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN				Berlingo [M59] - Berlingo 1.6i 16V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> </ul> </li> </ul>

2002/11 - 2008/04	NFU	1.6	109	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
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CITROEN					
Berlingo [M59] - Berlingo 1.9 Diesel					
Year	Engine	Liters	HP	System	Functions
2002/11 - 2008/04	WJY	1.9	71	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN					
Berlingo [M59] - Berlingo 2.0 HDi					
Year	Engine	Liters	HP	System	Functions
2002/11 - 2008/04	RHY	2.0	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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CITROEN Berlingo [M59] - Berlingo 1.6 HDi					
Year	Engine	Liters	HP	System	Functions
2005/09 - 2008/04	9HX	1.6	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
2005/07 - 2008/04	9HW	1.6	75	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN C-Crosser [I4] - C-Crosser 2.2 HDi 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

2007/09

4HN

2.2

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Engine control  
Diesel EDC 16CP39 MIT

- **Clear errors**
- **Functional tests**
  - Quantities comparison
- **Adjustments / settings**
  - Injector quantity adjustment
  - Exhaust gas recirculation control unit
  - Reset Lambda sensor adaptation values
  - Rest of particle filter adaption values
  - HFM adaption reset
  - Reset DPF adaptation parameters
  - Reset additive level
  - Filling of additive tank
  - Adapt air mass meter
  - Reset turbocharger adaption values
  - Exhaust gas recirculation valve basic setting
- **Special functions**
  - Actual value particle filter
- **Error memory**
- **Current values**
  - Air compressor request
  - Quantity correction for cylinder 1
  - Quantity correction for cylinder 2
  - Quantity correction for cylinder 3
  - Quantity correction for cylinder 4
  - Vehicle driving speed
  - Accelerator pedal position
  - Fuel temperature
  - Coolant temperature
  - Exhausted gases recirculation system
  - Battery voltage
  - Engine revolution
  - atmospheric pressure
  - Exhaust gas recirculation control
  - cruise control switch
  - valve, exhausted gases recirculation
  - Pressure control turbo charger
  - Immobilizer
  - Regulator, exhausted gases recirculation (ARF)
  - fan relay
  - Rail pressure, nominal
  - Rail pressure, actual
  - Air mass, nominal value
  - Air mass, actual value
  - Turbo pressure, nominal value
  - Turbo pressure, actual value
  - Intake air temperature
  - Brake pedal switch
  - Acceleration pedal position sensor 1
  - Acceleration pedal position sensor 2
  - Brake pedal switch (redundancy)
  - Engine oil pressure signal
  - Tempomat speed (required value)
  - Radiator fan control
  - Cooling agent pressure
  - Exhausted gases recirculation valve position (EGR)
  - Additive minimum level
  - Injected amount of additive
  - Correction, Injection time
  - DPF temperature
  - VGT (variable turbine geometry) Control Status
  - Time with critical exhaust temperature
  - Time with critical piston temperature
  - Particulate filter contamination level
  - Estimated remaining HDP operating time
  - High-pressure pump running time with excessive pressure
  - Number of electronic control unit programming

				<ul style="list-style-type: none"> <li>- Clutch pedal</li> <li>- Exhaust gas recirculation Position Actual Value</li> <li>- Exhaust gas recirculation Position Target Value</li> <li>- Ash content particle filter</li> <li>- Injected quantity (total)</li> <li>- Cooling agent compressor request</li> <li>- Radiator fan controller target value</li> <li>- Particle filter differential pressure</li> <li>- Intake air temperature 2</li> <li>- Cylinder 1 injector voltage</li> <li>- Cylinder 2 injector voltage</li> <li>- Cylinder 3 injector voltage</li> <li>- Cylinder 4 injector voltage</li> <li>- Mileage (km) since regeneration</li> <li>- Calculated remaining mileage in km</li> <li>- Status speed control</li> <li>- Average time last 5 regenerations</li> <li>- Fuel high pressure control/quantity control</li> <li>- Idle speed control long term adjustment</li> <li>- Additive reservoir</li> <li>- Suction control valve control current nominal value</li> <li>- Suction control valve control current actual value</li> <li>- Distance from the last DPF change</li> <li>- Particle filter quality</li> <li>- Additive system status</li> <li>- Residual additive quantity</li> <li>• <b>Actuators</b></li> <li>- fan for blowing radiator control</li> <li>- turbo charger regulating valve</li> <li>- exhausted gases recirculation solenoid</li> <li>- warming up relay</li> <li>- Engine oil sensor</li> <li>- Suction control valve</li> <li>- Fuel pressure controller</li> <li>- Bypass valve of the exhaust gas recirculation cooler</li> <li>- Additive delivery pump</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Quantities comparison</li> <li>• <b>Adjustments / settings</b></li> <li>- Injector quantity adjustment</li> <li>- Exhaust gas recirculation control unit</li> <li>- Reset Lambda sensor adaptation values</li> <li>- Rest of particle filter adaption values</li> <li>- HFM adaption reset</li> <li>- Reset DPF adaptation parameters</li> <li>- Reset additive level</li> <li>- Filling of additive tank</li> <li>- Adapt air mass meter</li> <li>- Reset turbocharger adaption values</li> <li>- Exhaust gas recirculation valve basic setting</li> <li>• <b>Special functions</b></li> <li>- Actual value particle filter</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Air compressor request</li> <li>- Quantity correction for cylinder 1</li> <li>- Quantity correction for cylinder 2</li> <li>- Quantity correction for cylinder 3</li> <li>- Quantity correction for cylinder 4</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> </ul>

2010/06

4HK

2.2

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Engine control  
Diesel EDC 16CP39 MIT

- Coolant temperature
- Exhausted gases recirculation system
- Battery voltage
- Engine revolution
- atmospheric pressure
- Exhaust gas recirculation control
- cruise control switch
- valve, exhausted gases recirculation
- Pressure control turbo charger
- Immobilizer
- Regulator, exhausted gases recirculation (ARF)
- fan relay
- Rail pressure, nominal
- Rail pressure, actual
- Air mass, nominal value
- Air mass, actual value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Brake pedal switch
- Acceleration pedal position sensor 1
- Acceleration pedal position sensor 2
- Brake pedal switch (redundancy)
- Engine oil pressure signal
- Tempomat speed (required value)
- Radiator fan control
- Cooling agent pressure
- Exhausted gases recirculation valve position (EGR)
- Additive minimum level
- Injected amount of additive
- Correction, Injection time
- DPF temperature
- VGT (variable turbine geometry) Control Status
- Time with critical exhaust temperature
- Time with critical piston temperature
- Particulate filter contamination level
- Estimated remaining HDP operating time
- High-pressure pump running time with excessive pressure
- Number of electronic control unit programming
- Clutch pedal
- Exhaust gas recirculation Position Actual Value
- Exhaust gas recirculation Position Target Value
- Ash content particle filter
- Injected quantity (total)
- Cooling agent compressor request
- Radiator fan controller target value
- Particle filter differential pressure
- Intake air temperature 2
- Cylinder 1 injector voltage
- Cylinder 2 injector voltage
- Cylinder 3 injector voltage
- Cylinder 4 injector voltage
- Mileage (km) since regeneration
- Calculated remaining mileage in km
- Status speed control
- Average time last 5 regenerations
- Fuel high pressure control/quantity control
- Idle speed control long term adjustment
- Additive reservoir
- Suction control valve control current nominal value
- Suction control valve control current actual value
- Distance from the last DPF change
- Particle filter quality
- Additive system status

					<ul style="list-style-type: none"> <li>- Residual additive quantity</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- fan for blowing radiator control</li> <li>- turbo charger regulating valve</li> <li>- exhausted gases recirculation solenoid</li> <li>- warming up relay</li> <li>- Engine oil sensor</li> <li>- Suction control valve</li> <li>- Fuel pressure controller</li> <li>- Bypass valve of the exhaust gas recirculation cooler</li> <li>- Additive delivery pump</li> </ul> </li> </ul>
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CITROEN					C5 [X4] - C5 2.2 HDi	
Year	Engine	Liters	HP	System	Functions	
2001/03 - 2004/09	4HX	2.2	133	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>	

CITROEN					C5 [X4] - C5 2.0 HDi	
Year	Engine	Liters	HP	System	Functions	
2001/03 - 2004/09	RHY	2.0	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
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CITROEN C5 [X4] Break - C5 2.0 HDi Break					
Year	Engine	Liters	HP	System	Functions
2001/06 - 2004/09	RHZ	2.0	109	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN C5 [X4] Break - C5 2.2 HDi Break					
Year	Engine	Liters	HP	System	Functions
2001/06 - 2004/09	4HX	2.2	133	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN C5 [X7] - C5 3.0 HDi 24V					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

- **Clear errors**
- **Functional tests**
  - Quantities comparison
  - Particulate filter temperature evaluation
- **Adjustments / settings**
  - Adaptive parameters reset
  - Read configuration
  - Injector quantity adjustment
  - Exhaust gas recirculation control unit
  - Restoration of adaptation values of the exhaust gas recirculation
    - Reset Lambda sensor adaptation values
    - Reset after replacement of additive filter
    - Reset, exhaust gas recirculation, solenoid valve, bank 1
      - Reset, exhaust gas recirculation, solenoid valve, bank 2
- **Special functions**
  - Actual value particle filter
- **Error memory**
- **Current values**
  - Transmission type
  - Quantity correction for cylinder 1
  - Quantity correction for cylinder 2
  - Quantity correction for cylinder 3
  - Quantity correction for cylinder 4
  - Quantity correction for cylinder 5
  - Quantity correction for cylinder 6
  - Vehicle driving speed
  - Engine oil pressure
  - Accelerator pedal position
  - Fuel temperature
  - Status immobilizer
  - Coolant temperature
  - air conditioner/compressor readiness signal
  - Engine revolution
  - atmospheric pressure
  - Gear engaged
  - oxygen sensor voltage
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Oxygen sensor warm-up
  - Control unit power supply
  - signal, brake switch
  - recommended idle revolutions
  - fuel-air mixture
  - Engine status
  - ignition blocking signal
  - Main relay
  - turbo charger regulating valve
  - turbo charger regulating valve
  - engine oil temperature
  - actual value of moment motor
  - stop lights switch
  - injected fuel quantity
  - camshaft with crank shaft engagement
  - Additional heating relay
  - Rail pressure, nominal
  - Rail pressure, actual
  - Turbo pressure, nominal value
  - Turbo pressure, actual value
  - CAN: front axle speed
  - Starter activation
  - CAN message, engine revolutions signal
  - Fan 1 control
  - Brake pedal switch

2009/07 -	X8Z	3.0	241	Engine control Diesel EDC 17CP11	<ul style="list-style-type: none"> <li>- Acceleration pedal position sensor 1</li> <li>- Acceleration pedal position sensor 2</li> <li>- Cruise control: variable speed limiting</li> <li>- Fuel quantity metering device pulse-duty factor</li> <li>- Variable speed limit</li> <li>- Cooling agent pressure sensor</li> <li>- Full throttle gas pedal position</li> <li>- Brake pedal switch (redundancy)</li> <li>- Start permission</li> <li>- Wheel acceleration</li> <li>- System in fail safe</li> <li>- Cooling agent temperature control light</li> <li>- Tempomat speed (required value)</li> <li>- Charging-air pressure magnetic valve 2</li> <li>- Fuel level minimum</li> <li>- Cooling agent pressure</li> <li>- Control unit status</li> <li>- Immobilizer status</li> <li>- Additive minimum level</li> <li>- Injected amount of additive</li> <li>- Particle filter output temperature</li> <li>- Drive current, high-pressure pump</li> <li>- Ancillaries status signal</li> <li>- DPF remaining mileage can be read out</li> <li>- Particulate filter contamination level</li> <li>- Alternator regulator</li> <li>- Number of terminated DPF regenerations</li> <li>- Tank fill level via CAN</li> <li>- Radiator fan triggering actual value</li> <li>- Electr. supplm. heater actuation</li> <li>- Exhaust gas recirculation Position Actual Value</li> <li>- Exhaust gas recirculation Position Target Value</li> <li>- Ash content particle filter</li> <li>- Distance since last regeneration</li> <li>- Adaptation for exhaust gas recirculation, bank 1</li> <li>- Adaptation for exhaust gas recirculation, bank 2</li> <li>- Calculated fuel quantity in oil</li> <li>- Exhaust gas recirculation position actual value, bank 2</li> <li>- Metering unit duty cycle, specified value</li> <li>- Boost pressure control status bank 1</li> <li>- Boost pressure control status, bank 2</li> <li>- Additive tank first filling</li> <li>- Time until rail pressure attained</li> <li>- Fuel metering unit duty cycle</li> <li>- Final compression</li> <li>- Final compression temperature</li> <li>- Cooling agent compressor request</li> <li>- Exhaust gas temperature before particle filter</li> <li>- Particle filter differential pressure</li> <li>- Initialization</li> <li>- Radiator fan request air-conditioner</li> <li>- CAN message - coolant temperature</li> <li>- Intake air temperature 2</li> <li>- AGR cooling solenoid valve</li> <li>- Status Particle filter-Regeneration</li> <li>- Particle filter temperature</li> <li>- Status Wake-Up Signal</li> <li>- Driver input torque</li> <li>- Conditions for DPF-Regeneration</li> <li>- Intake air, temperature 1</li> <li>- Status Tempomat</li> <li>- Carbon black content Particle filter</li> <li>- EGR adaption mode status</li> <li>- Additive reservoir</li> <li>- Average mileage between regenerations</li> <li>- Power loss</li> <li>- Engine oil temperature sensor</li> </ul>
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					<ul style="list-style-type: none"> <li>- Time from last regeneration</li> <li>- Distance from the last DPF change</li> <li>- Particle filter quality</li> <li>- Residual additive quantity</li> <li>- Charge pressure actuator 2 actual position</li> <li>- Charge pressure actuator 2 specified position</li> <li>- Turbocharger boost pressure valve, set value</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Air pressure in intake manifold</li> <li>- Oxygen sensor</li> <li>- circuit compressor control</li> <li>- exhausted gases recirculation control circuit</li> <li>- interference engine</li> <li>- Air mass meter signal</li> <li>- exhausted gases recirculation solenoid 1</li> <li>- exhausted gases recirculation solenoid 2</li> <li>- Main relay</li> <li>- warming up relay</li> <li>- Additional heater</li> <li>- Suction control valve</li> <li>- Fuel pressure controller</li> <li>- Charging-air pressure controller 1</li> <li>- Charging-air pressure controller 2</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: medium speed</li> <li>- Exhaust gas recirculation control unit</li> <li>- Bypass valve of the exhaust gas recirculation cooler</li> </ul> </li> </ul>
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CITROEN					C5 [X7] Tourer - C5 3.0 HDi 24V Tourer	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Quantities comparison</li> <li>- Particulate filter temperature evaluation</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Read configuration</li> <li>- Injector quantity adjustment</li> <li>- Exhaust gas recirculation control unit</li> <li>- Restoration of adaptation values of the exhaust gas recirculation <ul style="list-style-type: none"> <li>- Reset Lambda sensor adaptation values</li> <li>- Reset after replacement of additive filter</li> <li>- Reset, exhaust gas recirculation, solenoid valve, bank 1</li> <li>- Reset, exhaust gas recirculation, solenoid valve, bank 2</li> </ul> </li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Actual value particle filter</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Transmission type</li> <li>- Quantity correction for cylinder 1</li> <li>- Quantity correction for cylinder 2</li> <li>- Quantity correction for cylinder 3</li> <li>- Quantity correction for cylinder 4</li> <li>- Quantity correction for cylinder 5</li> <li>- Quantity correction for cylinder 6</li> <li>- Vehicle driving speed</li> <li>- Engine oil pressure</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Status immobilizer</li> </ul> </li> </ul>	

2009/07 -	X8Z	3.0	241	Engine control Diesel EDC 17CP11	<ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- air conditioner/compressor readiness signal</li> <li>- Engine revolution</li> <li>- atmospheric pressure</li> <li>- Gear engaged</li> <li>- oxygen sensor voltage</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Oxygen sensor warm-up</li> <li>- Control unit power supply</li> <li>- signal, brake switch</li> <li>- recommended idle revolutions</li> <li>- fuel-air mixture</li> <li>- Engine status</li> <li>- ignition blocking signal</li> <li>- Main relay</li> <li>- turbo charger regulating valve</li> <li>- turbo charger regulating valve</li> <li>- engine oil temperature</li> <li>- actual value of moment motor</li> <li>- stop lights switch</li> <li>- injected fuel quantity</li> <li>- camshaft with crank shaft engagement</li> <li>- Additional heating relay</li> <li>- Rail pressure, nominal</li> <li>- Rail pressure, actual</li> <li>- Turbo pressure, nominal value</li> <li>- Turbo pressure, actual value</li> <li>- CAN: front axle speed</li> <li>- Starter activation</li> <li>- CAN message, engine revolutions signal</li> <li>- Fan 1 control</li> <li>- Brake pedal switch</li> <li>- Acceleration pedal position sensor 1</li> <li>- Acceleration pedal position sensor 2</li> <li>- Cruise control: variable speed limiting</li> <li>- Fuel quantity metering device pulse-duty factor</li> <li>- Variable speed limit</li> <li>- Cooling agent pressure sensor</li> <li>- Full throttle gas pedal position</li> <li>- Brake pedal switch (redundancy)</li> <li>- Start permission</li> <li>- Wheel acceleration</li> <li>- System in fail safe</li> <li>- Cooling agent temperature control light</li> <li>- Tempomat speed (required value)</li> <li>- Charging-air pressure magnetic valve 2</li> <li>- Fuel level minimum</li> <li>- Cooling agent pressure</li> <li>- Control unit status</li> <li>- Immobilizer status</li> <li>- Additive minimum level</li> <li>- Injected amount of additive</li> <li>- Particle filter output temperature</li> <li>- Drive current, high-pressure pump</li> <li>- Ancillaries status signal</li> <li>- DPF remaining mileage can be read out</li> <li>- Particulate filter contamination level</li> <li>- Alternator regulator</li> <li>- Number of terminated DPF regenerations</li> <li>- Tank fill level via CAN</li> <li>- Radiator fan triggering actual value</li> <li>- Electr. supplm. heater actuation</li> <li>- Exhaust gas recirculation Position Actual Value</li> <li>- Exhaust gas recirculation Position Target Value</li> <li>- Ash content particle filter</li> </ul>
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					<ul style="list-style-type: none"> <li>- Distance since last regeneration</li> <li>- Adaptation for exhaust gas recirculation, bank 1</li> <li>- Adaptation for exhaust gas recirculation, bank 2</li> <li>- Calculated fuel quantity in oil</li> <li>- Exhaust gas recirculation position actual value, bank 2</li> <li>- Metering unit duty cycle, specified value</li> <li>- Boost pressure control status bank 1</li> <li>- Boost pressure control status, bank 2</li> <li>- Additive tank first filling</li> <li>- Time until rail pressure attained</li> <li>- Fuel metering unit duty cycle</li> <li>- Final compression</li> <li>- Final compression temperature</li> <li>- Cooling agent compressor request</li> <li>- Exhaust gas temperature before particle filter</li> <li>- Particle filter differential pressure</li> <li>- Initialization</li> <li>- Radiator fan request air-conditioner</li> <li>- CAN message - coolant temperature</li> <li>- Intake air temperature 2</li> <li>- AGR cooling solenoid valve</li> <li>- Status Particle filter-Regeneration</li> <li>- Particle filter temperature</li> <li>- Status Wake-Up Signal</li> <li>- Driver input torque</li> <li>- Conditions for DPF-Regeneration</li> <li>- Intake air, temperature 1</li> <li>- Status Tempomat</li> <li>- Carbon black content Particle filter</li> <li>- EGR adaption mode status</li> <li>- Additive reservoir</li> <li>- Average mileage between regenerations</li> <li>- Power loss</li> <li>- Engine oil temperature sensor</li> <li>- Time from last regeneration</li> <li>- Distance from the last DPF change</li> <li>- Particle filter quality</li> <li>- Residual additive quantity</li> <li>- Charge pressure actuator 2 actual position</li> <li>- Charge pressure actuator 2 specified position</li> <li>- Turbocharger boost pressure valve, set value</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Air pressure in intake manifold</li> <li>- Oxygen sensor</li> <li>- circuit compressor control</li> <li>- exhausted gases recirculation control circuit</li> <li>- interference engine</li> <li>- Air mass meter signal</li> <li>- exhausted gases recirculation solenoid 1</li> <li>- exhausted gases recirculation solenoid 2</li> <li>- Main relay</li> <li>- warming up relay</li> <li>- Additional heater</li> <li>- Suction control valve</li> <li>- Fuel pressure controller</li> <li>- Charging-air pressure controller 1</li> <li>- Charging-air pressure controller 2</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: medium speed</li> <li>- Exhaust gas recirculation control unit</li> <li>- Bypass valve of the exhaust gas recirculation cooler</li> </ul> </li> </ul>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Quantities comparison</li> <li>- Particulate filter temperature evaluation</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Read configuration</li> <li>- Injector quantity adjustment</li> <li>- Exhaust gas recirculation control unit</li> <li>- Restoration of adaptation values of the exhaust gas recirculation <ul style="list-style-type: none"> <li>- Reset Lambda sensor adaptation values</li> <li>- Reset after replacement of additive filter</li> <li>- Reset, exhaust gas recirculation, solenoid valve, bank 1 <ul style="list-style-type: none"> <li>- Reset, exhaust gas recirculation, solenoid valve, bank 2</li> </ul> </li> </ul> </li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Actual value particle filter</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Transmission type</li> <li>- Quantity correction for cylinder 1</li> <li>- Quantity correction for cylinder 2</li> <li>- Quantity correction for cylinder 3</li> <li>- Quantity correction for cylinder 4</li> <li>- Quantity correction for cylinder 5</li> <li>- Quantity correction for cylinder 6</li> <li>- Vehicle driving speed</li> <li>- Engine oil pressure</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Status immobilizer</li> <li>- Coolant temperature</li> <li>- air conditioner/compressor readiness signal</li> <li>- Engine revolution</li> <li>- atmospheric pressure</li> <li>- Gear engaged</li> <li>- oxygen sensor voltage</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Oxygen sensor warm-up</li> <li>- Control unit power supply</li> <li>- signal, brake switch</li> <li>- recommended idle revolutions</li> <li>- fuel-air mixture</li> <li>- Engine status</li> <li>- ignition blocking signal</li> <li>- Main relay</li> <li>- turbo charger regulating valve</li> <li>- turbo charger regulating valve</li> <li>- engine oil temperature</li> <li>- actual value of moment motor</li> <li>- stop lights switch</li> <li>- injected fuel quantity</li> <li>- camshaft with crank shaft engagement</li> <li>- Additional heating relay</li> <li>- Rail pressure, nominal</li> <li>- Rail pressure, actual</li> <li>- Turbo pressure, nominal value</li> <li>- Turbo pressure, actual value</li> <li>- CAN: front axle speed</li> <li>- Starter activation</li> </ul> </li> </ul>

2009/07 -	X8Z	3.0	241	Engine control Diesel EDC 17CP11	<ul style="list-style-type: none"> <li>- CAN message, engine revolutions signal</li> <li>- Fan 1 control</li> <li>- Brake pedal switch</li> <li>- Acceleration pedal position sensor 1</li> <li>- Acceleration pedal position sensor 2</li> <li>- Cruise control: variable speed limiting</li> <li>- Fuel quantity metering device pulse-duty factor</li> <li>- Variable speed limit</li> <li>- Cooling agent pressure sensor</li> <li>- Full throttle gas pedal position</li> <li>- Brake pedal switch (redundancy)</li> <li>- Start permission</li> <li>- Wheel acceleration</li> <li>- System in fail safe</li> <li>- Cooling agent temperature control light</li> <li>- Tempomat speed (required value)</li> <li>- Charging-air pressure magnetic valve 2</li> <li>- Fuel level minimum</li> <li>- Cooling agent pressure</li> <li>- Control unit status</li> <li>- Immobilizer status</li> <li>- Additive minimum level</li> <li>- Injected amount of additive</li> <li>- Particle filter output temperature</li> <li>- Drive current, high-pressure pump</li> <li>- Ancillaries status signal</li> <li>- DPF remaining mileage can be read out</li> <li>- Particulate filter contamination level</li> <li>- Alternator regulator</li> <li>- Number of terminated DPF regenerations</li> <li>- Tank fill level via CAN</li> <li>- Radiator fan triggering actual value</li> <li>- Electr. supplm. heater actuation</li> <li>- Exhaust gas recirculation Position Actual Value</li> <li>- Exhaust gas recirculation Position Target Value</li> <li>- Ash content particle filter</li> <li>- Distance since last regeneration</li> <li>- Adaptation for exhaust gas recirculation, bank 1</li> <li>- Adaptation for exhaust gas recirculation, bank 2</li> <li>- Calculated fuel quantity in oil</li> <li>- Exhaust gas recirculation position actual value, bank 2</li> <li>- Metering unit duty cycle, specified value</li> <li>- Boost pressure control status bank 1</li> <li>- Boost pressure control status, bank 2</li> <li>- Additive tank first filling</li> <li>- Time until rail pressure attained</li> <li>- Fuel metering unit duty cycle</li> <li>- Final compression</li> <li>- Final compression temperature</li> <li>- Cooling agent compressor request</li> <li>- Exhaust gas temperature before particle filter</li> <li>- Particle filter differential pressure</li> <li>- Initialization</li> <li>- Radiator fan request air-conditioner</li> <li>- CAN message - coolant temperature</li> <li>- Intake air temperature 2</li> <li>- AGR cooling solenoid valve</li> <li>- Status Particle filter-Regeneration</li> <li>- Particle filter temperature</li> <li>- Status Wake-Up Signal</li> <li>- Driver input torque</li> <li>- Conditions for DPF-Regeneration</li> <li>- Intake air, temperature 1</li> <li>- Status Tempomat</li> <li>- Carbon black content Particle filter</li> <li>- EGR adaption mode status</li> <li>- Additive reservoir</li> </ul>
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					<ul style="list-style-type: none"> <li>- Average mileage between regenerations</li> <li>- Power loss</li> <li>- Engine oil temperature sensor</li> <li>- Time from last regeneration</li> <li>- Distance from the last DPF change</li> <li>- Particle filter quality</li> <li>- Residual additive quantity</li> <li>- Charge pressure actuator 2 actual position</li> <li>- Charge pressure actuator 2 specified position</li> <li>- Turbocharger boost pressure valve, set value</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Air pressure in intake manifold</li> <li>- Oxygen sensor</li> <li>- circuit compressor control</li> <li>- exhausted gases recirculation control circuit</li> <li>- interference engine</li> <li>- Air mass meter signal</li> <li>- exhausted gases recirculation solenoid 1</li> <li>- exhausted gases recirculation solenoid 2</li> <li>- Main relay</li> <li>- warming up relay</li> <li>- Additional heater</li> <li>- Suction control valve</li> <li>- Fuel pressure controller</li> <li>- Charging-air pressure controller 1</li> <li>- Charging-air pressure controller 2</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: medium speed</li> <li>- Exhaust gas recirculation control unit</li> <li>- Bypass valve of the exhaust gas recirculation cooler</li> </ul>
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CITROEN					C8 [V3] - C8 2.0 HDi	
Year	Engine	Liters	HP	System	Functions	
2002/06 - 2006/12	RHW	2.0	110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> </ul> </li> </ul>	

2006/03 - 2010/05	RHK	2.0	120	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> <ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
2010/06 -	RHH	2.0	163	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN					C8 [V3] - C8 2.2 HDi	
Year	Engine	Liters	HP	System	Functions	
2002/06 - 2006/07	4HW	2.2	128	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> </ul> </li> </ul>	

					- Fuel metering valve
2007/09 - 2010/05	4H...	2.2	163 - 170	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN Evasion [U60] - Evasion 1.9 Diesel Turbo					
Year	Engine	Liters	HP	System	Functions
1994/10 - 2002/07	DHX	1.9	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN Evasion [U60] - Evasion 2.1 Diesel Turbo					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> </ul> </li> </ul>



1996/04 - 2002/07	P8C	2.1	109 - 110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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CITROEN					
Evasion [U60] - Evasion 2.0 HDi					
Year	Engine	Liters	HP	System	Functions
1999/01 - 2002/07	RHZ	2.0	109	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
2000/06 - 2002/07	RHW	2.0	110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN Jumper - Jumper 2.8 HDI					
Year	Engine	Liters	HP	System	Functions
2005/09 - 2009/09	8140 43s	2.8	127	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

CITROEN Jumper - Jumper 2.3 HDI					
Year	Engine	Liters	HP	System	Functions
2009/10 - 2012/02	F1A	2.3	127	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

CITROEN Jumper [U9] - Jumper 2.2 HDi					
Year	Engine	Liters	HP	System	Functions
2006/06 -	4HV	2.2	101	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
2010/07 -	4HM	2.2	129	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul>
2011/06 -	4HG	2.2	110	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

CITROEN					Jumper [U9] - Jumper 3.0 HDi	
Year	Engine	Liters	HP	System	Functions	
2006/06 -	F1CE...	3.0	158	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>	
2010/01 -	F1CE3481N	3.0	146	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>	
2010/06 -	F1CE3481D	3.0	156	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> </ul> </li> </ul>	

2011/03 -	F1CE3481E	3.0	177	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>- Configuration save</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
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CITROEN					
Jumpy [G9] - Jumpy 2.0 HDi					
Year	Engine	Liters	HP	System	Functions
2007/02 -	RHR	2.0	136	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN					
Jumpy [G9] - Jumpy 1.6 HDi					
Year	Engine	Liters	HP	System	Functions
2007/02 -	9HU	1.6	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN Jumpy [U64] - Jumpy 1.9 Diesel Turbo					
Year	Engine	Liters	HP	System	Functions
1995/10 - 2007/01	D8B	1.9	92 - 94	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN Jumpy [U64] - Jumpy 1.9 Diesel					
Year	Engine	Liters	HP	System	Functions
1995/10 - 2007/01	D9B	1.9	69 - 71	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> </ul> </li> </ul>

1998/10 - 2001/08	WJZ	1.9	69	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
2001/09 - 2007/01	WJY	1.9	71	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>

CITROEN					
Jumpy [U64] - Jumpy 1.6i					
Year	Engine	Liters	HP	System	Functions
1995/10 - 2007/01	220 A2.000	1.6	79	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>

CITROEN						Jumpy [U64] - Jumpy 2.0 HDi					
Year	Engine	Liters	HP	System		Functions					
1999/10 - 2007/01	RHZ	2.0	109	Heating / Air conditioner Auxiliary/supplementary heater 1.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>					
2000/06 - 2007/01	RHW	2.0	110	Heating / Air conditioner Auxiliary/supplementary heater 1.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>					

CITROEN						Jumpy [U64] - Jumpy 2.0i					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> </ul> </li> </ul>					

2000/04 - 2007/01	RFN	2.0	136	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supple./auxiliary heater fuel pump</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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CITROEN						Nemo [A9] - Nemo 1.4 HDi					
Year	Engine	Liters	HP	System		Functions					
2008/02 -	8HS	1.4	68	Parking assisting system Park Distance Control 4.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>					

CITROEN						Nemo [A9] - Nemo 1.4					
Year	Engine	Liters	HP	System		Functions					
2008/02 -	KFV	1.4	73	Parking assisting system Park Distance Control 4.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>					
2010/01 -	KFT	1.4	73	Parking assisting system Park Distance Control 4.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>					

CITROEN						Nemo [A9] - Nemo 1.3 HDi					
Year	Engine	Liters	HP	System		Functions					



2010/08 -	FHZ	1.3	75	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>
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CITROEN					Xantia [X2] - Xantia 2.0 HDi	
Year	Engine	Liters	HP	System	Functions	
1998/10 - 2001/12	RHZ	2.0	110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>	
1999/03 - 2001/12	RHY	2.0	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>	

CITROEN				Xantia [X2] - Xantia 3.0i	
Year	Engine	Liters	HP	System	Functions
1997/12 - 2001/12	XFZ	3.0	190	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN				Xantia [X2] - Xantia 1.8i	
Year	Engine	Liters	HP	System	Functions
1997/10 - 2001/12	LFX	1.8	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN				Xantia [X2] - Xantia 1.8i 16V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> </ul> </li> </ul>

1997/12 - 2001/12	LFY	1.8	110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
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CITROEN						Xantia [X2] - Xantia 2.0i Turbo	
Year	Engine	Liters	HP	System	Functions		
1997/12 - 2001/12	RGX	2.0	147 - 150	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>		

CITROEN						Xantia [X2] - Xantia 2.0i	
Year	Engine	Liters	HP	System	Functions		
1997/12 - 2001/12	RFX	2.0	120 - 123	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>		

					<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
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CITROEN Xantia [X2] - Xantia 2.0i 16V					
Year	Engine	Liters	HP	System	Functions
1997/12 - 2001/12	RFV	2.0	132 - 135	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b></li> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>

CITROEN Xantia [X2] - Xantia 1.9 Diesel Turbo					
Year	Engine	Liters	HP	System	Functions
1997/12 - 2001/12	DHW	1.9	75	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b></li> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>

CITROEN		Xantia [X2] - Xantia 2.1 Diesel Turbo			
Year	Engine	Liters	HP	System	Functions
1997/12 - 2001/12	P8C	2.1	109 - 110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN		Xantia [X2] - Xantia 1.6i			
Year	Engine	Liters	HP	System	Functions
1998/03 - 2001/12	BFZ	1.6	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN		Xantia [X2] Break - Xantia 3.0i Break			
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> </ul> </li> </ul>

1998/01 - 2001/12	XFZ	3.0	190	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
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CITROEN						Xantia [X2] Break - Xantia 2.0 HDi Break	
Year	Engine	Liters	HP	System	Functions		
1998/10 - 2001/12	RHZ	2.0	110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>		
1999/03 - 2001/12	RHY	2.0	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> </ul> </li> </ul>		

					<ul style="list-style-type: none"> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
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CITROEN Xantia [X2] Break - Xantia 1.8i Break					
Year	Engine	Liters	HP	System	Functions
1997/12 - 2001/12	LFX	1.8	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN Xantia [X2] Break - Xantia 1.8i 16V Break					
Year	Engine	Liters	HP	System	Functions
1997/12 - 2001/12	LFY	1.8	110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN Xantia [X2] Break - Xantia 2.0i Turbo Break					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

1997/12 - 2001/12	RGX	2.0	147 - 150	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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CITROEN					
Xantia [X2] Break - Xantia 2.0i 16V Break					
Year	Engine	Liters	HP	System	Functions
1997/12 - 2001/12	RFV	2.0	132 - 135	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN					
Xantia [X2] Break - Xantia 1.9 Diesel Turbo Break					
Year	Engine	Liters	HP	System	Functions
1997/12 -	DHW	1.9	75	Heating / Air conditioner	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> </ul> </li> </ul>



2001/12				Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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CITROEN Xantia [X2] Break - Xantia 2.1 Diesel Turbo Break					
Year	Engine	Liters	HP	System	Functions
1997/12 - 2001/12	P8C	2.1	109 - 110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN Xsara Picasso [N68] - Xsara Picasso 2.0 HDi					
Year	Engine	Liters	HP	System	Functions
2000/01 - 2010/04	RHY	2.0	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> </ul> </li> </ul>

- Fuel metering valve

CITROEN					Xsara Picasso [N68] - Xsara Picasso 1.6 HDi	
Year	Engine	Liters	HP	System	Functions	
2004/05 - 2010/04	9H...	1.6	109	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>	
2005/09 - 2010/04	9HX	1.6	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>	

CITROEN					Xsara [N6] - Xsara 1.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> </ul> </li> </ul>	

1997/07 - 2000/08	KFX	1.4	75	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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CITROEN						Xsara [N6] - Xsara 1.6i					
Year	Engine	Liters	HP	System		Functions					
1997/07 - 2000/08	NFZ	1.6	88 - 90	Heating / Air conditioner Auxiliary/supplementary heater 1.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>					

CITROEN						Xsara [N6] - Xsara 1.8i					
Year	Engine	Liters	HP	System		Functions					
1997/07 - 2000/08	LFX	1.8	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> </ul> </li> </ul>					

					<ul style="list-style-type: none"> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
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CITROEN					
Xsara [N6] - Xsara 1.8i 16V					
Year	Engine	Liters	HP	System	Functions
1997/07 - 2000/08	LFY	1.8	110 - 112	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN					
Xsara [N6] - Xsara 2.0i 16V					
Year	Engine	Liters	HP	System	Functions
1997/07 - 2000/08	RFS	2.0	163 - 167	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN					
Xsara [N6] - Xsara 1.9 Diesel					
Year	Engine	Liters	HP	System	Functions

Year	Engine	Liters	HP	System	Functions
1997/07 - 2000/08	DJY	1.9	68	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
1998/04 - 2000/08	WJZ	1.9	70	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN					
Xsara [N6] - Xsara 1.9 Diesel Turbo					
Year	Engine	Liters	HP	System	Functions
1997/07 - 2000/08	DHY	1.9	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
1998/01 - 2000/08	DHV	1.9	75	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN						Xsara [N6] - Xsara 1.5 Diesel					
Year	Engine	Liters	HP	System		Functions					
1997/07 - 2000/08	VJZ	1.5	58	Heating / Air conditioner Auxiliary/supplementary heater 1.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>					

CITROEN						Xsara [N6] - Xsara 1.8 Diesel					
Year	Engine	Liters	HP	System		Functions					

1997/07 - 2000/08	A9A,161A	1.8	60	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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CITROEN					
Xsara [N6] - Xsara 2.0 HDi					
Year	Engine	Liters	HP	System	Functions
1999/02 - 2000/08	RHY	2.0	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN					
Xsara [N6] Break - Xsara 1.8 Diesel Break					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> </ul> </li> </ul>

1998/04 - 2000/08	A9A,161A	1.8	60	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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CITROEN Xsara [N6] Break - Xsara 1.4i Break					
Year	Engine	Liters	HP	System	Functions
1998/04 - 2000/08	KFX	1.4	75	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN Xsara [N6] Break - Xsara 1.8i Break					
Year	Engine	Liters	HP	System	Functions
1998/04 - 2000/08	LFX	1.8	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
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**CITROEN Xsara [N6] Break - Xsara 1.8i 16V Break**

Year	Engine	Liters	HP	System	Functions
1998/04 - 2000/08	LFY	1.8	110 - 112	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

**CITROEN Xsara [N6] Break - Xsara 1.9 Diesel Break**

Year	Engine	Liters	HP	System	Functions
1998/04 - 2000/08	DJY	1.9	68	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

**CITROEN Xsara [N6] Break - Xsara 1.9 Diesel Turbo Break**

Year	Engine	Liters	HP	System	Functions
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1998/04 - 2000/08	DHY	1.9	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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CITROEN						Xsara [N6] Break - Xsara 2.0i 16V Break					
Year	Engine	Liters	HP	System		Functions					
1998/07 - 2000/08	RFV	2.0	132	Heating / Air conditioner Auxiliary/supplementary heater 1.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>					

CITROEN						Xsara [N6] Break - Xsara 1.5 Diesel Break					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> </ul> </li> </ul>					

1997/10 - 2000/08	VJY	1.5	58	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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CITROEN Xsara [N6] Break - Xsara 1.6i Break					
Year	Engine	Liters	HP	System	Functions
1997/10 - 2000/08	NFZ	1.6	88 - 90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN Xsara [N6] Break - Xsara 2.0 HDi Break					
Year	Engine	Liters	HP	System	Functions
1999/02 - 2000/08	RHY	2.0	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
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CITROEN Xsara [N6] Coupe - Xsara 2.0 HDi Coupe					
Year	Engine	Liters	HP	System	Functions
1999/02 - 2000/08	RHY	2.0	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN Xsara [N6] Coupe - Xsara 1.4i Coupe					
Year	Engine	Liters	HP	System	Functions
1997/07 - 2000/08	KFX	1.4	75	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN Xsara [N6] Coupe - Xsara 1.8i Coupe					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

1997/07 - 2000/08	LFX	1.8	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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CITROEN						Xsara [N6] Coupe - Xsara 1.8i 16V Coupe					
Year	Engine	Liters	HP	System		Functions					
1997/07 - 2000/08	LFY	1.8	110 - 112	Heating / Air conditioner Auxiliary/supplementary heater 1.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>					

CITROEN						Xsara [N6] Coupe - Xsara 2.0i 16V Coupe					
Year	Engine	Liters	HP	System		Functions					
1997/07						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> </ul> </li> </ul>					

- 2000/08	RFV	2.0	132	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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**CITROEN Xsara [N6] Coupe - Xsara 1.8 Diesel Coupe**

Year	Engine	Liters	HP	System	Functions
1997/07 - 2000/08	A9A,161A	1.8	60	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> </ul> </li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

**CITROEN Xsara [N6] Coupe - Xsara 1.9 Diesel Coupe**

Year	Engine	Liters	HP	System	Functions
1997/07 - 2000/08	DJY	1.9	68	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> </ul> </li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warmer plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
1998/04 - 2000/08	WJZ	1.9	70	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

CITROEN Xsara [N6] Coupe - Xsara 1.9 Diesel Turbo Coupe					
Year	Engine	Liters	HP	System	Functions
1998/01 - 2000/08	DHV	1.9	75	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
1997/07 -	DHY	1.9	90	Heating / Air conditioner	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> </ul> </li> </ul>

2000/08

Auxiliary/supplementary heater 1.0

- Flame detection
- Fuel dosing pump
- Glow element duty cycle
- Supplem./auxiliary heater fuel pump
- **Actuators**
  - Detonation unit warming plug
  - Pump, hot water
  - Stationary heating: warming up
  - Combustion air blower
  - Fuel dosing pump
  - Fuel metering valve



[Bravo '07 \[198\] - Bravo 1.9 Multijet](#)  
[Bravo '07 \[198\] - Bravo 1.4 16V](#)  
[Bravo '07 \[198\] - Bravo 1.4 Turbo 16V](#)  
[Bravo '07 \[198\] - Bravo 1.6 Multijet](#)  
[Bravo '07 \[198\] - Bravo 2.0 Multijet](#)  
[Bravo '07 \[198\] - Bravo 1.4 16V LPG](#)  
[Bravo '10 \[198\] - Bravo 1.4](#)  
[Bravo '10 \[198\] - Bravo 1.4 LPG](#)  
[Bravo '10 \[198\] - Bravo 1.4 Turbo](#)  
[Bravo '10 \[198\] - Bravo 1.6 Multijet](#)  
[Bravo '10 \[198\] - Bravo 2.0 Multijet](#)  
[Bravo \[198\] - Bravo 1.8 16V](#)  
[Croma '05 \[194\] - Croma 2.2 i.e.](#)  
[Croma '05 \[194\] - Croma 1.9 JTD 8V](#)  
[Croma '05 \[194\] - Croma 1.9 JTD 16V](#)  
[Croma '05 \[194\] - Croma 2.4 JTD](#)  
[Croma '05 \[194\] - Croma 1.8 i.e.](#)  
[Doblo '10 \[263\] - Doblo 1.4](#)  
[Doblo '10 \[263\] - Doblo 1.3 Multijet](#)  
[Doblo '10 \[263\] - Doblo 1.6 Multijet](#)  
[Doblo '10 \[263\] - Doblo 2.0 Multijet](#)  
[Doblo '10 \[263\] - Doblo 1.4 Natural Power](#)  
[Doblo Cargo '10 \[263\] - Doblo Cargo 1.3 Multijet](#)  
[Doblo Cargo '10 \[263\] - Doblo Cargo 1.4](#)  
[Doblo Cargo '10 \[263\] - Doblo Cargo 1.6 Multijet](#)  
[Doblo Cargo '10 \[263\] - Doblo Cargo 2.0 Multijet](#)  
[Doblo Cargo '10 \[263\] - Doblo Cargo 1.4 Natural Power](#)  
[Ducato '06 \[250\] - Ducato 11 100 Multijet](#)  
[Ducato '06 \[250\] - Ducato 15 100 Multijet](#)  
[Ducato '06 \[250\] - Ducato 17 100 Multijet](#)  
[Ducato '06 \[250\] - Ducato Maxi 17 120 Multijet](#)  
[Ducato '06 \[250\] - Ducato Maxi 20 120 Multijet](#)  
[Ducato '06 \[250\] - Ducato 11 120 Multijet](#)  
[Ducato '06 \[250\] - Ducato 11 160 Multijet](#)  
[Ducato '06 \[250\] - Ducato 15 120 Multijet](#)  
[Ducato '06 \[250\] - Ducato 15 160 Multijet](#)  
[Ducato '06 \[250\] - Ducato 17 120 Multijet](#)  
[Ducato '06 \[250\] - Ducato 17 160 Multijet](#)  
[Ducato '06 \[250\] - Ducato Maxi 17 160 Multijet](#)  
[Ducato '06 \[250\] - Ducato Maxi 20 160 Multijet](#)  
[Ducato '06 \[250\] - Ducato Maxi 20 130 Multijet](#)  
[Ducato '06 \[250\] - Ducato Maxi 17 130 Multijet](#)  
[Ducato '06 \[250\] - Ducato 17 130 Multijet](#)  
[Ducato '06 \[250\] - Ducato 15 130 Multijet](#)  
[Ducato '06 \[250\] - Ducato 11 130 Multijet](#)  
[Ducato '06 \[250\] - Ducato 17 140 Natural Power](#)

[Ducato '06 \[250\] - Ducato 20 150 Multijet](#)  
[Ducato '06 \[250\] - Ducato 20 160 Multijet](#)  
[Ducato '06 \[250\] - Ducato 17 150 Multijet](#)  
[Ducato '06 \[250\] - Ducato 20 140 Natural Power](#)  
[Ducato '08 \[244\] - Ducato 11 2.3 JTD](#)  
[Ducato '08 \[244\] - Ducato 15 2.3 JTD](#)  
[Ducato '08 \[244\] - Ducato 15 2.3 JTD EGR](#)  
[Ducato '08 \[244\] - Ducato 18 2.3 JTD](#)  
[Ducato '08 \[244\] - Ducato 18 2.3 JTD EGR](#)  
[Ducato '11 \[250\] - Ducato 115 Multijet](#)  
[Ducato '11 \[250\] - Ducato 130 Multijet](#)  
[Ducato '11 \[250\] - Ducato 150 Multijet](#)  
[Ducato '11 \[250\] - Ducato 180 Multijet](#)  
[Ducato '11 \[250\] - Ducato 110 Multijet](#)  
[Fiorino '07 \[225\] - Fiorino 1.3 Multijet](#)  
[Fiorino '07 \[225\] - Fiorino 1.4](#)  
[Fiorino '07 \[225\] - Fiorino 1.4 Natural Power](#)  
[Grande Punto \[199\] - Grande Punto 1.4 LPG](#)  
[Idea - Idea 1.8](#)  
[Idea - Idea 1.4](#)  
[Idea - Idea 1.6](#)  
[Idea Adventure - Idea Adventure 1.8](#)  
[Idea Adventure - Idea Adventure 1.6](#)  
[Idea Adventure Locker - Idea Adventure Locker 1.8 Flex](#)  
[Idea Adventure \[Fase I\] - Idea Adventure 1.8 Flex](#)  
[Idea \[350\] - Idea 1.3 JTD 16V](#)  
[Idea \[350\] - Idea 1.4 16V](#)  
[Idea \[350\] - Idea 1.2 16V](#)  
[Idea \[350\] - Idea 1.9 JTD 8V](#)  
[Idea \[350\] - Idea 1.4 8V](#)  
[Idea \[350\] - Idea 1.6 JTD 16V](#)  
[Idea \[350\] - Idea 1.4 8V LPG](#)  
[Idea \[350\] - Idea 1.3 Multijet](#)  
[Idea \[Fase II\] - Idea 1.4 Flex](#)  
[Idea \[Fase II\] - Idea 1.6 16V Flex](#)  
[Idea \[Fase II\] - Idea 1.8 16V Flex](#)  
[Idea \[Fase I\] - Idea 1.4 Flex](#)  
[Idea \[Fase I\] - Idea 1.8 Flex](#)  
[Linea - Linea 1.4 16V Turbo](#)  
[Linea - Linea 1.9 16V Flex](#)  
[Linea - Linea 1.9 16V Flex Dualogic](#)  
[Linea - Linea 1.8 16V Flex \(LX\)](#)  
[Linea - Linea 1.8 16V Flex Dualogic \(LX\)](#)  
[Linea - Linea 1.8 16V Flex](#)  
[Linea - Linea 1.8 16V Flex Dualogic](#)  
[Linea - Linea 1.9 16V](#)  
[Linea - Linea 1.8](#)  
[Linea \[110\] - Linea 1.4 16V](#)

[Linea \[110\] - Linea 1.3 JTD](#)  
[Linea \[110\] - Linea 1.4 i.e. 16V](#)  
[Linea \[323\] - Linea 1.4](#)  
[Linea \[323\] - Linea 1.4 Turbo](#)  
[Linea \[323\] - Linea 1.3 Multijet](#)  
[Linea \[323\] - Linea 1.6 Multijet](#)  
[Panda '03 \[169\] - Panda 1.2 i.e. LPG](#)  
[Panda '03 \[169\] - Panda 1.3 JTD](#)  
[Panda '09 \[169\] - Panda 1.2 LPG](#)  
[Panda '09 \[169\] - Panda 1.3 JTD](#)  
[Panda '09 \[169\] - Panda 1.3 JTD 4x4](#)  
[Punto '12 \[199\] - Punto 1.4 LPG](#)  
[Punto Evo \[199\] - Punto Evo 1.4 LPG](#)  
[Punto \[118\] - Punto 1.4 Flex](#)  
[Punto \[118\] - Punto 1.8 Flex](#)  
[Punto \[118\] - Punto 1.4](#)  
[Punto \[118\] - Punto 1.8](#)  
[Punto \[118\] - Punto 1.4 16V T-Jet](#)  
[Punto \[118\] - Punto 1.6 16V Flex](#)  
[Punto \[118\] - Punto 1.8 16V Flex](#)  
[Punto \[118\] - Punto 1.6 16V](#)  
[Punto \[118\] - Punto 1.3 16V JTD](#)  
[Qubo \[300\] - Qubo 1.3 Multijet](#)  
[Qubo \[300\] - Qubo 1.4](#)  
[Qubo \[300\] - Qubo 1.4 Natural Power](#)  
[Scudo '07 \[270\] - Scudo 1.6 D Multijet](#)  
[Scudo '07 \[270\] - Scudo 2.0 D Multijet](#)  
[Scudo '07 \[270\] - Scudo 2.0](#)  
[Stilo - Stilo 1.8 MPI 8V](#)  
[Stilo - Stilo 1.8 MPI 16V](#)  
[Stilo - Stilo 2.4 MPI 20V](#)  
[Stilo - Stilo 1.8 MPI 8V Flex](#)  
[Stilo - Stilo 1.8 MPI 8V Flex Dualogic](#)  
[Stilo '01 \[192\] - Stilo 1.6 16V](#)  
[Stilo '01 \[192\] - Stilo 2.4 20V](#)  
[Stilo '01 \[192\] - Stilo 1.9 JTD 8V](#)  
[Stilo '01 \[192\] - Stilo 1.8 16V](#)  
[Stilo '04 \[192\] - Stilo 1.6 16V](#)  
[Stilo '04 \[192\] - Stilo 1.9 JTD 8V](#)  
[Stilo '04 \[192\] - Stilo 1.8 16V](#)  
[Stilo '04 \[192\] - Stilo 1.9 JTD 16V](#)  
[Stilo '04 \[192\] - Stilo 1.4 16V](#)  
[Stilo Multi Wagon \[192\] - Stilo 1.8 16V S.W.](#)  
[Stilo Multi Wagon \[192\] - Stilo 1.6 16V S.W.](#)  
[Stilo Multi Wagon \[192\] - Stilo 1.9 JTD 8V S.W.](#)  
[Stilo Multi Wagon \[192\] - Stilo 1.4 16V S.W.](#)  
[Stilo Multi Wagon \[192\] - Stilo 1.9 JTD 16V S.W.](#)  
[Stilo Multi Wagon \[192\] - Stilo 2.4 20V S.W.](#)

[Ulysse '03 \[179\] - Ulysse 2.0 16V](#)

[Ulysse '03 \[179\] - Ulysse 2.0 16V JTD](#)

[Ulysse '03 \[179\] - Ulysse 2.2 16V JTD](#)

[Ulysse '03 \[179\] - Ulysse 3.0 V6 24V](#)

Year	Engine	Liters	HP	System	Functions
2007/03 - 2009/12	192 A8.000	1.9	120	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring <ul style="list-style-type: none"> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> </ul> </li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
			Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
			Tire control system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring</li> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> </ul> </li> </ul>

2007/04 - 2009/12	937 A5.000	1.9	150	Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b></li> <li>- Warning, tyre pressure monitor</li> </ul>
				Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Read configuration</li> <li>- Configuration save</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul>

FIAT					Bravo '07 [198] - Bravo 1.4 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- System test</li> <li>- Check antenna function</li> <li>• <b>Adjustments / settings</b></li> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> </ul>	

<p>2007/03 - 2009/12</p>	<p>192 B2.000</p>	<p>1.4</p>	<p>90</p>	<p>Tire control system Tire pressure monitor 1.2</p>	<ul style="list-style-type: none"> <li>- Number of registered sensor codes</li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring</li> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
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<b>FIAT</b>	<b>Bravo '07 [198] - Bravo 1.4 Turbo 16V</b>
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Year	Engine	Liters	HP	System	Functions
2007/07 - 2009/12	198 A1.000	1.4	150	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring</li> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
			Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring</li> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> </ul> </li> </ul>

<p>2007/10 - 2009/12</p>	<p>198 A4.000</p>	<p>1.4</p>	<p>120</p>	<p>Tire control system Tire pressure monitor 1.2</p>	<ul style="list-style-type: none"> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 2.3</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
2007/10 - 2009/12	198 A3.000	1.6	105	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring</li> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
			Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
			Tire control system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring <ul style="list-style-type: none"> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> </ul> </li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> </ul> </li> </ul>

2008/03 - 2009/12	198 A2.000	1.6	120	Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b></li> <li>- Warning, tyre pressure monitor</li> </ul>
				Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Read configuration</li> <li>- Configuration save</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- System test</li> <li>- Check antenna function</li> <li>• <b>Adjustments / settings</b></li> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

2008/11 - 2009/12	955 A4.000	1.6	116	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring</li> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> </ul> </li> </ul>	

				Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>- Configuration save</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
2009/02 - 2009/12	198 A6.000	1.6	90	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring               <ul style="list-style-type: none"> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> </ul> </li> </ul> </li> </ul>



				<ul style="list-style-type: none"> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
			Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT					Bravo '07 [198] - Bravo 2.0 Multijet	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring <ul style="list-style-type: none"> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> </ul> </li> </ul> </li> </ul>	

2008/10 - 2009/12	198 A5.000	2.0	165	<p>Tire control system Tire pressure monitor 1.2</p>	<ul style="list-style-type: none"> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 2.3</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Bravo '07 [198] - Bravo 1.4 16V LPG					
Year	Engine	Liters	HP	System	Functions

Tire control system  
Tire pressure monitor 1.2

- **Identification**
- **Clear errors**
- **Functional tests**
  - System test
  - Check antenna function
- **Adjustments / settings**
  - Tire inflation pressure set value change
  - Transfer configuration
  - Pressure sensor adaption check (travelling)
  - Status change, control unit
  - Number of registered sensor codes
- **Read the event memory**
- **Delete the event memory**
- **Error memory**
- **Current values**
  - Power supply terminal 15
  - Power supply
  - Vehicle driving speed
  - Overload protection
  - Tire pressure monitoring system, status
  - Tyre inflation monitoring system, pressure monitoring
    - Fitted tires type
    - Pressure sensor status, front left
    - Pressure sensor status, front right
    - Pressure sensor status, rear left
    - Pressure sensor status, rear right
    - Rear left tire temperature
    - Rear right tire temperature
    - Front left tire temperature
    - Front right tire temperature
    - Rear left sensor code
    - Rear right sensor code
    - Front left sensor code
    - Front right sensor code
    - Ignition key
    - Tire pressure, rear right
    - Tire pressure, rear left
    - Tire pressure, front left
    - Tire pressure, front right
    - Front left wheel status
    - Front right wheel status
    - Rear left wheel status
    - Rear right wheel status
    - Number of monitored wheels
    - Position/sensor 1
    - Position/sensor 2
    - Position/sensor 3
    - Position/sensor 4
    - Position/sensor 5
    - Valve code, sensor 1
    - Valve code, sensor 2
    - Valve code, sensor 3
    - Valve code, sensor 4
    - Valve code/sensor 5
    - Front axle tire pressure set value
    - Rear axle tire pressure set value
    - 1st alarm triggering
    - 2nd alarm triggering
    - 3rd alarm triggering
    - Antenna fault detection
    - Front axle tire pressure set value/warm
    - Wheel position 1st alarm triggering
    - Interference signal
    - 2nd alarm source
    - 3rd alarm source
    - Rear axle tire pressure set value/warm
    - 1st alarm source

2009/03 - 2009/12	192 B2.000	1.4	90		<ul style="list-style-type: none"> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 2.3</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
				<p>Engine control Landi Renzo LC02</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Coolant temperature</li> <li>- Engine revolution</li> <li>- emergency switch off</li> <li>- electric fuel pump</li> <li>- Engine status</li> <li>- Control unit, internal relay</li> <li>- Injection time, cylinder 1</li> <li>- Injection time, cylinder 2</li> <li>- Injection time, cylinder 3</li> <li>- Injection time, cylinder 4</li> <li>- Fuel feeding stop</li> <li>- LPG operation</li> <li>- Petrol operation</li> <li>- Liquefied petroleum gas level warning lamp</li> <li>- Liquefied petroleum gas switch</li> <li>- Gas tank level</li> <li>- Operating time</li> <li>- Gas switching waiting time</li> <li>- Gas shut-off valve current input</li> <li>- Control unit temperature</li> <li>- Dry-running operation function</li> <li>- Fuel mode requested</li> <li>- Fuel mode</li> <li>- Current at the fuel pump</li> <li>- Gas rail temperature</li> <li>- Gas rail pressure</li> <li>- Gas shut-off valve</li> <li>- Injection time/cylinder 1</li> <li>- Injection time/cylinder 2</li> <li>- Injection time/cylinder 3</li> <li>- Injection time/cylinder 4</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- emergency switch off</li> <li>- electrical fuel pump relay</li> <li>- Liquefied petroleum gas indicator lamp</li> <li>- Injection valve Cylinder 1</li> <li>- Injection valve Cylinder 2</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Injection valve Cylinder 3</li> <li>- Injection valve Cylinder 4</li> <li>- Gas shut-off valve</li> <li>- Operating mode indicator lamp</li> </ul>
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<b>FIAT</b>	<b>Bravo '10 [198] - Bravo 1.4</b>
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Year	Engine	Liters	HP	System	Functions
2010/03 -	192 B2.000	1.4	90	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring               <ul style="list-style-type: none"> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> </ul> </li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 2.3</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT					Bravo '10 [198] - Bravo 1.4 LPG	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring <ul style="list-style-type: none"> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> </ul> </li> </ul> </li> </ul>	

2010/03	192 B2.000	1.4	90	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> </ul> </li> <li>• <b>Error memory</b></li> </ul>

				<p>Engine control Landi Renzo LC02</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Coolant temperature</li> <li>- Engine revolution</li> <li>- emergency switch off</li> <li>- electric fuel pump</li> <li>- Engine status</li> <li>- Control unit, internal relay</li> <li>- Injection time, cylinder 1</li> <li>- Injection time, cylinder 2</li> <li>- Injection time, cylinder 3</li> <li>- Injection time, cylinder 4</li> <li>- Fuel feeding stop</li> <li>- LPG operation</li> <li>- Petrol operation</li> <li>- Liquefied petroleum gas level warning lamp</li> <li>- Liquefied petroleum gas switch</li> <li>- Gas tank level</li> <li>- Operating time</li> <li>- Gas switching waiting time</li> <li>- Gas shut-off valve current input</li> <li>- Control unit temperature</li> <li>- Dry-running operation function</li> <li>- Fuel mode requested</li> <li>- Fuel mode</li> <li>- Current at the fuel pump</li> <li>- Gas rail temperature</li> <li>- Gas rail pressure</li> <li>- Gas shut-off valve</li> <li>- Injection time/cylinder 1</li> <li>- Injection time/cylinder 2</li> <li>- Injection time/cylinder 3</li> <li>- Injection time/cylinder 4</li> <li>• <b>Actuators</b></li> <li>- emergency switch off</li> <li>- electrical fuel pump relay</li> <li>- Liquefied petroleum gas indicator lamp</li> <li>- Injection valve Cylinder 1</li> <li>- Injection valve Cylinder 2</li> <li>- Injection valve Cylinder 3</li> <li>- Injection valve Cylinder 4</li> <li>- Gas shut-off valve</li> <li>- Operating mode indicator lamp</li> </ul>
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FIAT					Bravo '10 [198] - Bravo 1.4 Turbo	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- System test</li> <li>- Check antenna function</li> <li>• <b>Adjustments / settings</b></li> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> </ul>	



2010/03	198 A4.000	1.4	120	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring</li> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> </ul> </li> </ul>

- Reverse gear
- Trailer operation
- Number of electronic control unit programming
- Front Park Distance Control

FIAT					Bravo '10 [198] - Bravo 1.6 Multijet	
Year	Engine	Liters	HP	System	Functions	
2010/03 -	198 A6.000	1.6	90	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring <ul style="list-style-type: none"> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> </ul> </li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
			Parking assisting system Park Distance Control 2.3		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT					
Bravo '10 [198] - Bravo 2.0 Multijet					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring <ul style="list-style-type: none"> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> </ul> </li> </ul> </li> </ul>

2010/03 -	198 A...	2.0	163	<p>Tire control system Tire pressure monitor 1.2</p>	<ul style="list-style-type: none"> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 2.3</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Bravo [198] - Bravo 1.8 16V					
Year	Engine	Liters	HP	System	Functions

2010/12 -	370A0011	1.8	130 - 132	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
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FIAT					
Croma '05 [194] - Croma 2.2 i.e.					
Year	Engine	Liters	HP	System	Functions
2005/06 - 2010/12	194 A1.000	2.2	147	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring</li> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code, sensor 5</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul>
			Parking assisting system Park Distance Control 2.0	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul>

FIAT					Croma '05 [194] - Croma 1.9 JTD 8V	
Year	Engine	Liters	HP	System	Functions	
					<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Functional tests</b></p> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> <p><b>• Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> <p><b>• Read the event memory</b></p> <p><b>• Delete the event memory</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring</li> <li>- Fitted tires type</li> </ul>	

<p>2005/06 - 2010/12</p>	<p>939 A1.000</p>	<p>1.9</p>	<p>120</p>	<p>Tire control system Tire pressure monitor 1.2</p>	<ul style="list-style-type: none"> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
2005/06 - 2010/12	939 A2.000	1.9	150	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring</li> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> </ul> </li> </ul>



				<ul style="list-style-type: none"> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
			Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring <ul style="list-style-type: none"> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> </ul> </li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> </ul> </li> </ul>
2006/12				Tire control system Tire pressure monitor 1.2
-	939 A8.000	1.9	136	

2010/12					<ul style="list-style-type: none"> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b></li> <li>- Warning, tyre pressure monitor</li> </ul>
				<p>Parking assisting system Park Distance Control 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul>

FIAT Croma '05 [194] - Croma 2.4 JTD					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- System test</li> <li>- Check antenna function</li> <li>• <b>Adjustments / settings</b></li> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> </ul>

2005/06 - 2010/12	939 A3.000	2.4	200	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring</li> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> </ul> </li> </ul>

- Trailer operation
- System

FIAT					Croma '05 [194] - Croma 1.8 i.e.	
Year	Engine	Liters	HP	System	Functions	
2005/06 - 2010/12	939 A4.000	1.8	140	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring <ul style="list-style-type: none"> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> </ul> </li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Doblo '10 [263] - Doblo 1.4					
Year	Engine	Liters	HP	System	Functions
2010/02 -	843 A1.000	1.4	95	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>
2011/10 -	198 A4.000	1.4	120	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

FIAT Doblo '10 [263] - Doblo 1.3 Multijet					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> </ul>

2010/02 -	199 A3.000	1.3	90	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>
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FIAT Doblo '10 [263] - Doblo 1.6 Multijet					
Year	Engine	Liters	HP	System	Functions
2010/02 -	198 A3.000	1.6	105	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

FIAT Doblo '10 [263] - Doblo 2.0 Multijet					
Year	Engine	Liters	HP	System	Functions
2010/02 -	263 A1.000	2.0	135	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

FIAT Doblo '10 [263] - Doblo 1.4 Natural Power					
Year	Engine	Liters	HP	System	Functions
2010/06 -	198 A4.000	1.4	120	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

FIAT Doblo Cargo '10 [263] - Doblo Cargo 1.3 Multijet					
Year	Engine	Liters	HP	System	Functions

Year	Engine	Liters	HP	System	Functions
2010/02 -	199 A3.000	1.3	90	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

FIAT Doblo Cargo '10 [263] - Doblo Cargo 1.4					
Year	Engine	Liters	HP	System	Functions
2010/02 -	843 A1.000	1.4	95	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>
2011/10 -	198 A4.000	1.4	120	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

FIAT Doblo Cargo '10 [263] - Doblo Cargo 1.6 Multijet					
Year	Engine	Liters	HP	System	Functions
2010/02 -	198 A3.000	1.6	105	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

FIAT Doblo Cargo '10 [263] - Doblo Cargo 2.0 Multijet					
Year	Engine	Liters	HP	System	Functions

2010/02 -	263 A1.000	2.0	135	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>
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FIAT Doblo Cargo '10 [263] - Doblo Cargo 1.4 Natural Power					
Year	Engine	Liters	HP	System	Functions
2010/06 -	198 A4.000	1.4	120	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato 11 100 Multijet					
Year	Engine	Liters	HP	System	Functions
2006/06 -	4HV	2.2	100	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato 15 100 Multijet					
Year	Engine	Liters	HP	System	Functions
2006/06 -	4HV	2.2	100	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>



- Front Park Distance Control

FIAT Ducato '06 [250] - Ducato 17 100 Multijet					
Year	Engine	Liters	HP	System	Functions
2006/06 -	4HV	2.2	100	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato Maxi 17 120 Multijet					
Year	Engine	Liters	HP	System	Functions
2006/06 -	F1AE0481D	2.3	120	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato Maxi 20 120 Multijet					
Year	Engine	Liters	HP	System	Functions
2006/06 -	F1AE0481D	2.3	120	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato 11 120 Multijet					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> </ul> </li> </ul>

2006/06 -	F1AE0481D	2.3	120	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>- Configuration save</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
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FIAT Ducato '06 [250] - Ducato 11 160 Multijet					
Year	Engine	Liters	HP	System	Functions
2006/06 -	F1CE0481D	3.0	158	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato 15 120 Multijet					
Year	Engine	Liters	HP	System	Functions
2006/06 -	F1AE0481D	2.3	120	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato 15 160 Multijet					
Year	Engine	Liters	HP	System	Functions
2006/06 -	F1CE0481D	3.0	158	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato 17 120 Multijet					
Year	Engine	Liters	HP	System	Functions
2006/06 -	F1AE0481D	2.3	120	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato 17 160 Multijet					
Year	Engine	Liters	HP	System	Functions
2006/06 -	F1CE0481D	3.0	158	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato Maxi 17 160 Multijet					
Year	Engine	Liters	HP	System	Functions
2006/06 -	F1CE0481D	3.0	158	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato Maxi 20 160 Multijet					
Year	Engine	Liters	HP	System	Functions
2006/06 -	F1CE0481D	3.0	158	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

					<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul>
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FIAT Ducato '06 [250] - Ducato Maxi 20 130 Multijet					
Year	Engine	Liters	HP	System	Functions
2006/06 -	F1AE0481N	2.3	131	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato Maxi 17 130 Multijet					
Year	Engine	Liters	HP	System	Functions
2006/06 -	F1AE0481N	2.3	131	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato 17 130 Multijet					
Year	Engine	Liters	HP	System	Functions
2006/06 -	F1AE0481N	2.3	131	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato 15 130 Multijet					
Year	Engine	Liters	HP	System	Functions

Year	Engine	Liters	HP	System	Functions
2006/06 -	F1AE0481N	2.3	131	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato 11 130 Multijet					
Year	Engine	Liters	HP	System	Functions
2006/06 -	F1AE0481N	2.3	131	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato 17 140 Natural Power					
Year	Engine	Liters	HP	System	Functions
				Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Read configuration</li> <li>- Reset throttle valve adaptation values</li> <li>- Reset A/C /cruise control parameters</li> <li>- Reset after speed trigger wheel replacement</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- throttle valve position</li> <li>- Coolant temperature</li> </ul> </li> </ul>

2006/06 -	F1CE0441A	3.0	136	Engine control IAW 5SF4 Natural Power	<ul style="list-style-type: none"> <li>- Engine control unit</li> <li>- Engine revolution</li> <li>- Ignition angle</li> <li>- lambda integrator</li> <li>- Air conditioner compressor relay</li> <li>- throttle valve angle</li> <li>- system power supply</li> <li>- fan for radiator blowing</li> <li>- Exceeding the max revolution</li> <li>- Main relay</li> <li>- Max speed limitation</li> <li>- Acceleration pedal position sensor</li> <li>- Injection period</li> <li>- Accumulation time, ignition coil cylinder 1</li> <li>- Accumulation time, ignition coil cylinder 2</li> <li>- Accumulation time, ignition coil cylinder 3</li> <li>- Accumulation time, ignition coil cylinder 4</li> <li>- Brake pedal switch</li> <li>- Oxygen sensor bank 1, sensor 1)</li> <li>- Oxygen sensor (bank 1, sensor 2)</li> <li>- Transmission</li> <li>- Clutch pedal switch</li> <li>- intake manifold pressure sensor</li> <li>- Start permission</li> <li>- Gas pedal position sensor 1 Voltage</li> <li>- Gas pedal position sensor 2 Voltage</li> <li>- Oil pressure switch</li> <li>- Engine status</li> <li>- Air conditioner compressor request</li> <li>- Cooling agent pressure</li> <li>- Turbocharger control valve</li> <li>- Number of electronic control unit programming</li> <li>- Atmospheric pressure sensor</li> <li>- Overspeed frequency</li> <li>- Overspeed duration</li> <li>- Oxygen sensor status (B1, S1)</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Voltage DK position sensor 1</li> <li>- Voltage DK position sensor 2</li> <li>- Evaporative emission control volume</li> <li>- Ingested air temperature sensor 1</li> <li>- Km reading at the last programming</li> <li>- Gas tank pressure</li> <li>- Gas rail temperature</li> <li>- Gas rail pressure</li> <li>- Gas tank, pressure sensor, voltage</li> <li>- Var.turb.geom. turbocharger, specified position</li> <li>- Mileage on last overspeed</li> <li>- VTG turbocharger actual position</li> </ul>
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FIAT Ducato '06 [250] - Ducato 20 150 Multijet					
Year	Engine	Liters	HP	System	Functions
2010/09 -	F1CE3481N	3.0	146	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato 20 160 Multijet					
Year	Engine	Liters	HP	System	Functions
2010/09 -	F1CE3481M	3.0	156	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato 17 150 Multijet					
Year	Engine	Liters	HP	System	Functions
2010/04 -	F1CE3481N	3.0	146	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Ducato '06 [250] - Ducato 20 140 Natural Power					
Year	Engine	Liters	HP	System	Functions
				Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Read configuration</li> <li>- Reset throttle valve adaptation values</li> <li>- Reset A/C /cruise control parameters</li> <li>- Reset after speed trigger wheel replacement</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

2009/09 -	F1CE0441A	3.0	136	Engine control IAW 5SF4 Natural Power	<ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- throttle valve position</li> <li>- Coolant temperature</li> <li>- Engine control unit</li> <li>- Engine revolution</li> <li>- Ignition angle</li> <li>- lambda integrator</li> <li>- Air conditioner compressor relay</li> <li>- throttle valve angle</li> <li>- system power supply</li> <li>- fan for radiator blowing</li> <li>- Exceeding the max revolution</li> <li>- Main relay</li> <li>- Max speed limitation</li> <li>- Acceleration pedal position sensor</li> <li>- Injection period</li> <li>- Accumulation time, ignition coil cylinder 1</li> <li>- Accumulation time, ignition coil cylinder 2</li> <li>- Accumulation time, ignition coil cylinder 3</li> <li>- Accumulation time, ignition coil cylinder 4</li> <li>- Brake pedal switch</li> <li>- Oxygen sensor bank 1, sensor 1)</li> <li>- Oxygen sensor (bank 1, sensor 2)</li> <li>- Transmission</li> <li>- Clutch pedal switch</li> <li>- intake manifold pressure sensor</li> <li>- Start permission</li> <li>- Gas pedal position sensor 1 Voltage</li> <li>- Gas pedal position sensor 2 Voltage</li> <li>- Oil pressure switch</li> <li>- Engine status</li> <li>- Air conditioner compressor request</li> <li>- Cooling agent pressure</li> <li>- Turbocharger control valve</li> <li>- Number of electronic control unit programming</li> <li>- Atmospheric pressure sensor</li> <li>- Overspeed frequency</li> <li>- Overspeed duration</li> <li>- Oxygen sensor status (B1, S1)</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Voltage DK position sensor 1</li> <li>- Voltage DK position sensor 2</li> <li>- Evaporative emission control volume</li> <li>- Ingested air temperature sensor 1</li> <li>- Km reading at the last programming</li> <li>- Gas tank pressure</li> <li>- Gas rail temperature</li> <li>- Gas rail pressure</li> <li>- Gas tank, pressure sensor, voltage</li> <li>- Var.turb.geom. turbocharger, specified position</li> <li>- Mileage on last overspeed</li> <li>- VTG turbocharger actual position</li> </ul>
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FIAT Ducato '08 [244] - Ducato 11 2.3 JTD					
Year	Engine	Liters	HP	System	Functions
2008/01 -	F1AE0481C	2.3	110	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul>
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**FIAT Ducato '08 [244] - Ducato 15 2.3 JTD**

Year	Engine	Liters	HP	System	Functions
2008/01 -	F1AE0481C	2.3	110	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

**FIAT Ducato '08 [244] - Ducato 15 2.3 JTD EGR**

Year	Engine	Liters	HP	System	Functions
2008/01 -	F1AE0481C	2.3	110	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

**FIAT Ducato '08 [244] - Ducato 18 2.3 JTD**

Year	Engine	Liters	HP	System	Functions
2008/01 -	F1AE0481C	2.3	110	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

**FIAT Ducato '08 [244] - Ducato 18 2.3 JTD EGR**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

2008/01 -	F1AE0481C	2.3	110	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
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<b>FIAT</b>	<b>Ducato '11 [250] - Ducato 115 Multijet</b>
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Year	Engine	Liters	HP	System	Functions
				Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air consumption meter</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- Fuel pump relay</li> <li>- Engine control unit</li> <li>- fuel temperature sensor</li> <li>- Engine revolution</li> <li>- Cruise control</li> <li>- Exhausted gases recirculation</li> <li>- Lights switch 2</li> <li>- Immobilizer</li> <li>- system power supply</li> <li>- Exceeding the max revolution</li> <li>- Preheating control</li> <li>- Coolant temperature sensor</li> <li>- Air conditioner relay</li> <li>- Rail pressure sensor</li> <li>- Rail pressure, nominal</li> <li>- Air mass, nominal value</li> <li>- Turbo pressure, nominal value</li> <li>- Acceleration pedal position sensor</li> <li>- Brake pedal switch</li> <li>- Acceleration pedal position sensor 1</li> <li>- Acceleration pedal position sensor 2</li> <li>- Clutch pedal switch</li> <li>- Charging-air pressure sensor</li> <li>- Start permission</li> <li>- Lambda probes heater voltage</li> <li>- Air conditioner compressor request</li> <li>- Gear box transmission identification</li> <li>- Cooling agent pressure</li> <li>- Glow plugs control</li> <li>- EGR cooling bypass solenoid valve</li> </ul> </li> </ul>

2011/06 -	250 A1.000	2.0	115	<p>Engine control Diesel EDC 17C49 V1</p> <ul style="list-style-type: none"> <li>- Mileage since temperature indicator lamp on</li> <li>- Mileage since fuel water content lamp on</li> <li>- Mileage with DPF indicator lamp ON</li> <li>- Intake air temperature sensor 2, voltage</li> <li>- Diesel particulate filter</li> <li>- Voltage fuel temperature sensor</li> <li>- Voltage rail pressure sensor</li> <li>- Charging-air pressure sensor voltage</li> <li>- Number of electronic control unit programming</li> <li>- Atmospheric pressure sensor</li> <li>- Exhaust gas recirculation Position Actual Value</li> <li>- Exhaust gas recirculation Position Target Value</li> <li>- Evaporative emission control ventilation system</li> <li>- Engine coolant temperature sensor: signal voltage</li> <li>- Mileage since oil quality lamp activation</li> <li>- Overspeed frequency</li> <li>- Overspeed duration</li> <li>- Injected quantity (total)</li> <li>- Particle filter differential pressure</li> <li>- Throttle valve position</li> <li>- Oxygen concentration</li> <li>- Ingested air temperature sensor 1</li> <li>- Fuel quantity control valve</li> <li>- Water in fuel</li> <li>- Average time last 5 regenerations</li> <li>- Average range of the last 5 regenerations</li> <li>- Average range of the last 5 regenerations</li> <li>- Particle filter temperature</li> <li>- Distance since EDC-SG-Change</li> <li>- Km reading at the last programming</li> <li>- Ambient temperature sensor</li> <li>- km from the last DPF regeneration</li> <li>- Particle filter, saturation</li> <li>- Turbo charger bypass valve</li> <li>- Kilometer reading from the last DPF replacement</li> <li>- Partial regeneration operations count</li> <li>- Mileage on lubrication service warning</li> <li>- Mileage on last overspeed</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Preheat control light</li> <li>- Oil pressure control light</li> <li>- Throttle valve actuator</li> <li>- Cooling agent temperature warning light</li> <li>- Speed control light</li> <li>- Fuel water content light</li> <li>- Cooling agent compressor</li> <li>- Radiator fan relay 1</li> <li>- Radiator fan relay 2</li> <li>- Cranckcase heater element</li> <li>- Particle filter control light</li> <li>- Fuel metering block</li> <li>- Turbocharger wastegate control</li> <li>- Electric fuel pump relay</li> </ul> </li> </ul>
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FIAT Ducato '11 [250] - Ducato 130 Multijet					
Year	Engine	Liters	HP	System	Functions
				<p>Parking assisting system Park Distance Control 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul>
2011/06	F1AE3481D	2.3	130	<p>Engine control Diesel EDC 8F3 CF5 V2 CAN</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Injector quantity adjustment</li> <li>- Reset lubrication service</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air consumption meter</li> <li>- Oil quality</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- Coolant temperature sensor voltage</li> <li>- throttle valve position</li> <li>- Fuel pump relay</li> <li>- Engine control unit</li> <li>- fuel temperature sensor</li> <li>- Engine revolution</li> <li>- oxygen sensor voltage</li> <li>- cruise control switch</li> <li>- Cruise control</li> <li>- Exhausted gases recirculation</li> <li>- Lights switch 2</li> <li>- system power supply</li> <li>- Exceeding the max revolution</li> <li>- Coolant temperature sensor</li> <li>- Air conditioner relay</li> <li>- Rail pressure sensor</li> <li>- Rail pressure, nominal</li> <li>- Air mass, nominal value</li> <li>- Turbo pressure, nominal value</li> <li>- Acceleration pedal position sensor</li> <li>- Brake pedal switch</li> <li>- Acceleration pedal position sensor 1</li> <li>- Acceleration pedal position sensor 2</li> <li>- Clutch pedal switch</li> <li>- Charging-air pressure sensor</li> <li>- Start permission</li> <li>- Throttle valve required position</li> <li>- Air conditioner compressor request</li> <li>- Gear box transmission identification</li> <li>- Distance since last oil change</li> <li>- Cooling agent pressure</li> <li>- Turbocharger control valve</li> <li>- Mileage since temperature indicator lamp on</li> <li>- Mileage with DPF indicator lamp ON</li> <li>- Clutch pedal stop</li> <li>- No. of regenerations since lubrication service</li> <li>- Intake air temperature sensor 2, voltage</li> <li>- Start/stop release by Central electronics</li> <li>- Start/stop function</li> <li>- Start/stop function status</li> <li>- Start/stop activation prohibition</li> <li>- Brake booster switch</li> <li>- Voltage fuel temperature sensor</li> <li>- Voltage rail pressure sensor</li> <li>- Charging-air pressure sensor voltage</li> <li>- Number of electronic control unit programming</li> <li>- Atmospheric pressure sensor</li> <li>- Crankcase breather preheating</li> <li>- Mileage since oil quality lamp activation</li> <li>- Neutral position</li> <li>- Overspeed frequency</li> <li>- Overspeed duration</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Injected quantity (total)</li> <li>- Status particle filter</li> <li>- Particle filter differential pressure</li> <li>- Oxygen concentration</li> <li>- Ingested air temperature sensor 1</li> <li>- Intake-air temperature sensor 2</li> <li>- Fuel quantity control valve</li> <li>- Water in fuel</li> <li>- Average time last 5 regenerations</li> <li>- Average range of the last 5 regenerations</li> <li>- Average range of the last 5 regenerations</li> <li>- Particle filter temperature</li> <li>- Distance since EDC-SG-Change</li> <li>- Km reading at the last programming</li> <li>- km from the last DPF regeneration</li> <li>- Particle filter, saturation</li> <li>- Kilometer reading from the last DPF replacement</li> <li>- Var.turb.geom. turbocharger, specified position</li> <li>- Partial regeneration operations count</li> <li>- Mileage on lubrication service warning</li> <li>- Mileage on last overspeed</li> <li>- Number of regeneration requests</li> <li>- VTG turbocharger actual position</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Warming up control lamp</li> <li>- Air conditioner relay</li> <li>- Radiator fan stage 1</li> <li>- Radiator fan stage 2</li> <li>- Glow relay 1</li> <li>- Engine management system error lights</li> <li>- Oil pressure control light</li> <li>- Cooling agent temperature warning light</li> <li>- Speed control light</li> <li>- Fuel water content light</li> <li>- Cranckcase heater element</li> <li>- Particle filter control light</li> <li>- Turbocharger control motor</li> <li>- Fuel metering block</li> </ul> </li> </ul>
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FIAT					Ducato '11 [250] - Ducato 150 Multijet	
Year	Engine	Liters	HP	System	Functions	
				Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Injector quantity adjustment</li> <li>- Reset lubrication service</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air consumption meter</li> <li>- Oil quality</li> </ul> </li> </ul>	

2011/06

F1AE3481E

2.3

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Engine control  
Diesel EDC 8F3 CF5 V2 CAN

- Vehicle driving speed
- Mileage
- Coolant temperature sensor voltage
- throttle valve position
- Fuel pump relay
- Engine control unit
- fuel temperature sensor
- Engine revolution
- oxygen sensor voltage
- cruise control switch
- Cruise control
- Exhausted gases recirculation
- Lights switch 2
- system power supply
- Exceeding the max revolution
- Coolant temperature sensor
- Air conditioner relay
- Rail pressure sensor
- Rail pressure, nominal
- Air mass, nominal value
- Turbo pressure, nominal value
- Acceleration pedal position sensor
- Brake pedal switch
- Acceleration pedal position sensor 1
- Acceleration pedal position sensor 2
- Clutch pedal switch
- Charging-air pressure sensor
- Start permission
- Throttle valve required position
- Air conditioner compressor request
- Gear box transmission identification
- Distance since last oil change
- Cooling agent pressure
- Turbocharger control valve
- Mileage since temperature indicator lamp on
- Mileage with DPF indicator lamp ON
- Clutch pedal stop
- No. of regenerations since lubrication service
- Intake air temperature sensor 2, voltage
- Start/stop release by Central electronics
- Start/stop function
- Start/stop function status
- Start/stop activation prohibition
- Brake booster switch
- Voltage fuel temperature sensor
- Voltage rail pressure sensor
- Charging-air pressure sensor voltage
- Number of electronic control unit programming
- Atmospheric pressure sensor
- Crankcase breather preheating
- Mileage since oil quality lamp activation
- Neutral position
- Overspeed frequency
- Overspeed duration
- Injected quantity (total)
- Status particle filter
- Particle filter differential pressure
- Oxygen concentration
- Ingested air temperature sensor 1
- Intake-air temperature sensor 2
- Fuel quantity control valve
- Water in fuel
- Average time last 5 regenerations
- Average range of the last 5 regenerations
- Average range of the last 5 regenerations
- Particle filter temperature
- Distance since EDC-SG-Change
- Km reading at the last programming

					<ul style="list-style-type: none"> <li>- km from the last DPF regeneration</li> <li>- Particle filter, saturation</li> <li>- Kilometer reading from the last DPF replacement</li> <li>- Var.turb.geom. turbocharger, specified position</li> <li>- Partial regeneration operations count</li> <li>- Mileage on lubrication service warning</li> <li>- Mileage on last overspeed</li> <li>- Number of regeneration requests</li> <li>- VTG turbocharger actual position</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Warming up control lamp</li> <li>- Air conditioner relay</li> <li>- Radiator fan stage 1</li> <li>- Radiator fan stage 2</li> <li>- Glow relay 1</li> <li>- Engine management system error lights</li> <li>- Oil pressure control light</li> <li>- Cooling agent temperature warning light</li> <li>- Speed control light</li> <li>- Fuel water content light</li> <li>- Cranckcase heater element</li> <li>- Particle filter control light</li> <li>- Turbocharger control motor</li> <li>- Fuel metering block</li> </ul>
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FIAT Ducato '11 [250] - Ducato 180 Multijet					
Year	Engine	Liters	HP	System	Functions
2011/06 -	F1CE348IE	3.0	177	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> </ul> </li> <li>- Number of electronic control unit programming</li> </ul>

FIAT Ducato '11 [250] - Ducato 110 Multijet					
Year	Engine	Liters	HP	System	Functions
				Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> </ul> </li> <li>- Number of electronic control unit programming</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Injector quantity adjustment</li> <li>- Reset lubrication service</li> </ul> </li> <li>• <b>Error memory</b></li> </ul>

2011/10

F1AE3481G

2.3

113

Engine control  
Diesel EDC 8F3 CF5 V2 CAN

• **Current values**

- Air consumption meter
- Oil quality
- Vehicle driving speed
- Mileage
- Coolant temperature sensor voltage
- throttle valve position
- Fuel pump relay
- Engine control unit
- fuel temperature sensor
- Engine revolution
- oxygen sensor voltage
- cruise control switch
- Cruise control
- Exhausted gases recirculation
- Lights switch 2
- system power supply
- Exceeding the max revolution
- Coolant temperature sensor
- Air conditioner relay
- Rail pressure sensor
- Rail pressure, nominal
- Air mass, nominal value
- Turbo pressure, nominal value
- Acceleration pedal position sensor
- Brake pedal switch
- Acceleration pedal position sensor 1
- Acceleration pedal position sensor 2
- Clutch pedal switch
- Charging-air pressure sensor
- Start permission
- Throttle valve required position
- Air conditioner compressor request
- Gear box transmission identification
- Distance since last oil change
- Cooling agent pressure
- Turbocharger control valve
- Mileage since temperature indicator lamp on
- Mileage with DPF indicator lamp ON
- Clutch pedal stop
- No. of regenerations since lubrication service
- Intake air temperature sensor 2, voltage
- Start/stop release by Central electronics
- Start/stop function
- Start/stop function status
- Start/stop activation prohibition
- Brake booster switch
- Voltage fuel temperature sensor
- Voltage rail pressure sensor
- Charging-air pressure sensor voltage
- Number of electronic control unit programming
- Atmospheric pressure sensor
- Crankcase breather preheating
- Mileage since oil quality lamp activation
- Neutral position
- Overspeed frequency
- Overspeed duration
- Injected quantity (total)
- Status particle filter
- Particle filter differential pressure
- Oxygen concentration
- Ingested air temperature sensor 1
- Intake-air temperature sensor 2
- Fuel quantity control valve
- Water in fuel
- Average time last 5 regenerations
- Average range of the last 5 regenerations
- Average range of the last 5 regenerations



					<ul style="list-style-type: none"> <li>- Particle filter temperature</li> <li>- Distance since EDC-SG-Change</li> <li>- Km reading at the last programming</li> <li>- km from the last DPF regeneration</li> <li>- Particle filter, saturation</li> <li>- Kilometer reading from the last DPF replacement</li> <li>- Var.turb.geom. turbocharger, specified position</li> <li>- Partial regeneration operations count</li> <li>- Mileage on lubrication service warning</li> <li>- Mileage on last overspeed</li> <li>- Number of regeneration requests</li> <li>- VTG turbocharger actual position</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Warming up control lamp</li> <li>- Air conditioner relay</li> <li>- Radiator fan stage 1</li> <li>- Radiator fan stage 2</li> <li>- Glow relay 1</li> <li>- Engine management system error lights</li> <li>- Oil pressure control light</li> <li>- Cooling agent temperature warning light</li> <li>- Speed control light</li> <li>- Fuel water content light</li> <li>- Cranckcase heater element</li> <li>- Particle filter control light</li> <li>- Turbocharger control motor</li> <li>- Fuel metering block</li> </ul>
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FIAT Fiorino '07 [225] - Fiorino 1.3 Multijet					
Year	Engine	Liters	HP	System	Functions
2007/12 -	199 A2.000	1.3	75	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> </ul> </li> <li>- Number of electronic control unit programming</li> </ul>
2010/09 -	199 B1.000	1.3	95	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> </ul> </li> <li>- Number of electronic control unit programming</li> </ul>
2010/06 -	199 A9.000	1.3	75	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

					<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul>
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FIAT Fiorino '07 [225] - Fiorino 1.4					
Year	Engine	Liters	HP	System	Functions
2007/12 -	KFV	1.4	73	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>
2010/06 -	KFT	1.4	73	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

FIAT Fiorino '07 [225] - Fiorino 1.4 Natural Power					
Year	Engine	Liters	HP	System	Functions
2009/10 -	350 A1.000	1.4	69 - 78	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

FIAT Grande Punto [199] - Grande Punto 1.4 LPG					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Coolant temperature</li> </ul> </li> </ul>

2008/09 - 2011/12	350 A1.000	1.4	76	Engine control Landi Renzo LC02	<ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- emergency switch off</li> <li>- electric fuel pump</li> <li>- Engine status</li> <li>- Control unit, internal relay</li> <li>- Injection time, cylinder 1</li> <li>- Injection time, cylinder 2</li> <li>- Injection time, cylinder 3</li> <li>- Injection time, cylinder 4</li> <li>- Fuel feeding stop</li> <li>- LPG operation</li> <li>- Petrol operation</li> <li>- Liquefied petroleum gas level warning lamp</li> <li>- Liquefied petroleum gas switch</li> <li>- Gas tank level</li> <li>- Operating time</li> <li>- Gas switching waiting time</li> <li>- Gas shut-off valve current input</li> <li>- Control unit temperature</li> <li>- Dry-running operation function</li> <li>- Fuel mode requested</li> <li>- Fuel mode</li> <li>- Current at the fuel pump</li> <li>- Gas rail temperature</li> <li>- Gas rail pressure</li> <li>- Gas shut-off valve</li> <li>- Injection time/cylinder 1</li> <li>- Injection time/cylinder 2</li> <li>- Injection time/cylinder 3</li> <li>- Injection time/cylinder 4</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- emergency switch off</li> <li>- electrical fuel pump relay</li> <li>- Liquefied petroleum gas indicator lamp</li> <li>- Injection valve Cylinder 1</li> <li>- Injection valve Cylinder 2</li> <li>- Injection valve Cylinder 3</li> <li>- Injection valve Cylinder 4</li> <li>- Gas shut-off valve</li> <li>- Operating mode indicator lamp</li> </ul> </li> </ul>
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FIAT						Idea - Idea 1.8	
Year	Engine	Liters	HP	System	Functions		
2006/01 - 2010/07		1.8	110	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> </ul> </li> </ul>		

					<ul style="list-style-type: none"> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul>
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FIAT					
Idea - Idea 1.4					
Year	Engine	Liters	HP	System	Functions
2007/01 - 2010/07	178F3011	1.4	80	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

2010/08 -		1.4	82	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul>
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FIAT						Idea - Idea 1.6	
Year	Engine	Liters	HP	System	Functions		
2010/08 -	310A5011	1.6	115	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul>		

FIAT						Idea Adventure - Idea Adventure 1.8	
Year	Engine	Liters	HP	System	Functions		
2006/01 - 2010/07		1.8	110	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Program sensor code (activator)</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> </ul>		

					- Rear axle tire pressure set value
2008/01 - 2010/07		1.8	110	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul> </li> </ul>

FIAT Idea Adventure - Idea Adventure 1.6					
Year	Engine	Liters	HP	System	Functions
2010/08 -	310A5011	1.6	115	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Idea Adventure Locker - Idea Adventure Locker 1.8 Flex					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> </ul>

2008/07 - 2010/07	X8	1.8	112 - 114	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul> </li> </ul>
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FIAT Idea Adventure [Fase I] - Idea Adventure 1.8 Flex					
Year	Engine	Liters	HP	System	Functions
2006/08 - 2010/07	93313090- 7U	1.8	112 - 114	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul>
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<b>FIAT</b>	<b>Idea [350] - Idea 1.3 JTD 16V</b>
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Year	Engine	Liters	HP	System	Functions
2004/01 -	188 A9.000	1.3	69	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul>
				<p>Tire control system Tire pressure monitor 1.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Throttle valve test</li> <li>- Quantities comparison</li> <li>- Glow plug test</li> <li>- Exhaust gas recirculation system test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Injector quantity adjustment</li> <li>- Reset Lambda sensor adaptation values</li> <li>- HFM adaption reset</li> <li>- Rail pressure sensor adjustment</li> </ul> </li> </ul>

2004/11  
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199 A3.000

1.3

90

Engine control  
Diesel EDC 8DF CF5

- Differential pressure sensor adjustment
- Neutral position initialization
- Reset after replacement of additive filter
- Turbocharger basic setting
- Reset mileage with coolant temp. warnng light ON
- Reset mileage with fuel water cont. lamp ON
- Reset A/C /cruise control parameters
- Reset after speed trigger wheel replacement
- Reset after wastegate valve replacement
- **Special functions**
  - Fuel tank emptying
  - Diesel particulate filter regeneration run
- **Error memory**
- **Current values**
  - Power supply
  - Oil quality
  - Vehicle driving speed
  - Accelerator pedal position
  - Mileage
  - throttle valve position
  - Fuel temperature
  - Coolant temperature
  - Engine control unit
  - Engine revolution
  - atmospheric pressure
  - Exhausted gases recirculation
  - Lights switch 2
  - Exceeding the max revolution
  - Rail pressure, nominal
  - Rail pressure, actual
  - Air mass, nominal value
  - Air mass, actual value
  - Turbo pressure, nominal value
  - Turbo pressure, actual value
  - Starter activation
  - Acceleration pedal position sensor 1
  - Acceleration pedal position sensor 2
  - Fuel quantity metering device pulse-duty factor
  - Start permission
  - Throttle valve required position
  - Air conditioner status
  - Gear box transmission identification
  - Last oil change
  - Cooling agent pressure
  - Cooling agent compressor
  - Brake pedal
  - Throttle actuator
  - Final intake temperature
  - EGR cooling bypass solenoid valve
  - Mileage since temperature indicator lamp on
  - Mileage since fuel water content lamp on
  - Mileage with DPF indicator lamp ON
  - Clutch pedal stop
  - Start/stop release by Central electronics
  - Start/stop function
  - Start/stop function status
  - Start/stop activation prohibition
  - Brake booster switch
  - Duty cycle load pressure control
  - Number of electronic control unit programming
  - Fuel pump relay
  - Clutch pedal
  - Electronic control unit replacement required
  - Wastegate valve opening counter
  - Wastegate valve opening time
  - Speed control signal
  - Neutral position
  - Overspeed frequency

					<ul style="list-style-type: none"> <li>- Overspeed duration</li> <li>- Injected quantity (total)</li> <li>- Status particle filter</li> <li>- Glow plug actuation</li> <li>- Operating switch speed</li> <li>- Particle filter differential pressure</li> <li>- Oxygen concentration</li> <li>- Average time last 5 regenerations</li> <li>- Average range of the last 5 regenerations</li> <li>- Average range of the last 5 regenerations</li> <li>- Particle filter temperature</li> <li>- Km reading at the last programming</li> <li>- km from the last DPF regeneration</li> <li>- Particle filter, saturation</li> <li>- Intake air initial temperature</li> <li>- Kilometer reading from the last DPF replacement</li> <li>- Var.turb.geom. turbocharger, specified position</li> <li>- Partial regeneration operations count</li> <li>- Mileage on lubrication service warning</li> <li>- Mileage on last overspeed</li> <li>- Number of regeneration requests</li> <li>- VTG turbocharger actual position</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- valve, exhausted gases recirculation</li> <li>- Radiator fan. stage 1</li> <li>- Radiator fan. stage 2</li> <li>- Suction control valve</li> <li>- Engine management system error lights</li> <li>- Oil pressure control light</li> <li>- Charging-air pressure magnetic valve</li> <li>- Cooling agent temperature warning light</li> <li>- Speed control light</li> <li>- Fuel water content light</li> <li>- Glow control light</li> <li>- Cooling agent compressor</li> <li>- Particle filter control light</li> </ul>
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FIAT					Idea [350] - Idea 1.4 16V	
Year	Engine	Liters	HP	System	Functions	
2004/01				Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> </ul> </li> </ul>	

- 2012/12	843 A1.000	1.4	95		<ul style="list-style-type: none"> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul>
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT					
Idea [350] - Idea 1.2 16V					
Year	Engine	Liters	HP	System	Functions
2004/01 - 2012/12	188 A5.000	1.2	80	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul>
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<b>FIAT</b>	<b>Idea [350] - Idea 1.9 JTD 8V</b>
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Year	Engine	Liters	HP	System	Functions
				Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Injector quantity adjustment</li> <li>- Reset Lambda sensor adaptation values</li> <li>- HFM adaption reset</li> </ul> </li> </ul>

2004/01  
-

188 B2.000

1.9

100

Engine control  
Diesel CR/EDC 16C9

- Rail pressure sensor adjustment
- **Error memory**
- **Current values**
  - Fuel filter warming
  - Vehicle driving speed
  - Engine oil pressure
  - Coolant temperature sensor voltage
  - throttle valve position
  - Fuel pump relay
  - Engine control unit
  - fuel temperature sensor
  - Engine revolution
  - cruise control switch
  - Lights switch 2
  - valve, exhausted gases recirculation
  - Immobilizer
  - system power supply
  - Exceeding the max revolution
  - turbo charger regulating valve
  - air conditioner compressor relay
  - Coolant temperature sensor
  - Rail pressure, nominal
  - Rail pressure, actual
  - Air mass, nominal value
  - Air mass, actual value
  - Turbo pressure, nominal value
  - Turbo pressure, actual value
  - Acceleration pedal position sensor
  - Brake pedal switch
  - Clutch pedal switch
  - Start permission
  - Gas pedal position sensor 1 Voltage
  - Gas pedal position sensor 2 Voltage
  - Odometer
  - Air conditioner status
  - Tempomat speed (required value)
  - Cooling agent pressure
  - Glow plugs control
  - Cruise control/ACC button, speed +
  - Cruise control/ACC button, speed -
  - Atmospheric pressure voltage sensor
  - Charging-air pressure sensor voltage
  - Number of electronic control unit programming
  - Atmospheric pressure sensor
  - Cruise control button "Resume"
  - Cruise control system
  - Overspeed frequency
  - Overspeed duration
  - Injected quantity (total)
  - Ingested air temperature sensor 1
  - Intake-air temperature sensor 2
  - Fuel quantity control valve
  - Water in fuel
  - Km reading at the last programming
- **Actuators**
  - Fuel filter warming
  - Fuel pump relay
  - valve, exhausted gases recirculation
  - Warming up control lamp
  - Air conditioner relay
  - Radiator fan stage 1
  - Radiator fan stage 2
  - Glow relay 1
  - Engine management system error lights
  - Oil pressure control light
  - Cooling agent temperature warning light
  - Speed control light
  - Throttle valves magnetic valve

					<ul style="list-style-type: none"> <li>- Fuel water content light</li> <li>- Turbocharger control motor</li> <li>- Fuel metering block</li> </ul>
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<b>FIAT</b>	<b>Idea [350] - Idea 1.4 8V</b>
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Year	Engine	Liters	HP	System	Functions
2004/11 - 2012/12	350 A1.000	1.4	78	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

<b>FIAT</b>	<b>Idea [350] - Idea 1.6 JTD 16V</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

2008/04 -	350 A2.000	1.6	120	<p>Tire control system Tire pressure monitor 1.1</p>	<ul style="list-style-type: none"> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT						Idea [350] - Idea 1.4 8V LPG	
Year	Engine	Liters	HP	System	Functions		
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> </ul> </li> </ul>		



2008/09 - 2012/12	350 A1.000	1.4	78	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul>
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
				Engine control Landi Renzo LC02	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Coolant temperature</li> <li>- Engine revolution</li> <li>- emergency switch off</li> <li>- electric fuel pump</li> <li>- Engine status</li> <li>- Control unit, internal relay</li> <li>- Injection time, cylinder 1</li> <li>- Injection time, cylinder 2</li> <li>- Injection time, cylinder 3</li> <li>- Injection time, cylinder 4</li> <li>- Fuel feeding stop</li> <li>- LPG operation</li> <li>- Petrol operation</li> <li>- Liquefied petroleum gas level warning lamp</li> <li>- Liquefied petroleum gas switch</li> <li>- Gas tank level</li> <li>- Operating time</li> <li>- Gas switching waiting time</li> <li>- Gas shut-off valve current input</li> <li>- Control unit temperature</li> <li>- Dry-running operation function</li> <li>- Fuel mode requested</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Fuel mode</li> <li>- Current at the fuel pump</li> <li>- Gas rail temperature</li> <li>- Gas rail pressure</li> <li>- Gas shut-off valve</li> <li>- Injection time/cylinder 1</li> <li>- Injection time/cylinder 2</li> <li>- Injection time/cylinder 3</li> <li>- Injection time/cylinder 4</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- emergency switch off</li> <li>- electrical fuel pump relay</li> <li>- Liquefied petroleum gas indicator lamp</li> <li>- Injection valve Cylinder 1</li> <li>- Injection valve Cylinder 2</li> <li>- Injection valve Cylinder 3</li> <li>- Injection valve Cylinder 4</li> <li>- Gas shut-off valve</li> <li>- Operating mode indicator lamp</li> </ul> </li> </ul>
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FIAT					
Idea [350] - Idea 1.3 Multijet					
Year	Engine	Liters	HP	System	Functions
				Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

				<p>Parking assisting system Park Distance Control 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul>
<p>2008/05 -</p>	<p>199 B1.000</p>	<p>1.3</p>	<p>95</p>	<p>Engine control Diesel EDC 8DF CF5</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Throttle valve test</li> <li>- Quantities comparison</li> <li>- Glow plug test</li> <li>- Exhaust gas recirculation system test</li> <li>• <b>Adjustments / settings</b></li> <li>- Injector quantity adjustment</li> <li>- Reset Lambda sensor adaptation values</li> <li>- HFM adaption reset</li> <li>- Rail pressure sensor adjustment</li> <li>- Differential pressure sensor adjustment</li> <li>- Neutral position initialization</li> <li>- Reset after replacement of additive filter</li> <li>- Turbocharger basic setting</li> <li>- Reset mileage with coolant temp. warnng light ON</li> <li>- Reset mileage with fuel water cont. lamp ON</li> <li>- Reset A/C /cruise control parameters</li> <li>- Reset after speed trigger wheel replacement</li> <li>- Reset after wastegate valve replacement</li> <li>• <b>Special functions</b></li> <li>- Fuel tank emptying</li> <li>- Diesel particulate filter regeneration run</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Oil quality</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Mileage</li> <li>- throttle valve position</li> <li>- Fuel temperature</li> <li>- Coolant temperature</li> <li>- Engine control unit</li> <li>- Engine revolution</li> <li>- atmospheric pressure</li> <li>- Exhausted gases recirculation</li> <li>- Lights switch 2</li> <li>- Exceeding the max revolution</li> <li>- Rail pressure, nominal</li> <li>- Rail pressure, actual</li> <li>- Air mass, nominal value</li> <li>- Air mass, actual value</li> <li>- Turbo pressure, nominal value</li> <li>- Turbo pressure, actual value</li> <li>- Starter activation</li> <li>- Acceleration pedal position sensor 1</li> <li>- Acceleration pedal position sensor 2</li> <li>- Fuel quantity metering device pulse-duty factor</li> <li>- Start permission</li> <li>- Throttle valve required position</li> <li>- Air conditioner status</li> <li>- Gear box transmission identification</li> <li>- Last oil change</li> <li>- Cooling agent pressure</li> <li>- Cooling agent compressor</li> <li>- Brake pedal</li> <li>- Throttle actuator</li> <li>- Final intake temperature</li> </ul>

					<ul style="list-style-type: none"> <li>- EGR cooling bypass solenoid valve</li> <li>- Mileage since temperature indicator lamp on</li> <li>- Mileage since fuel water content lamp on</li> <li>- Mileage with DPF indicator lamp ON</li> <li>- Clutch pedal stop</li> <li>- Start/stop release by Central electronics</li> <li>- Start/stop function</li> <li>- Start/stop function status</li> <li>- Start/stop activation prohibition</li> <li>- Brake booster switch</li> <li>- Duty cycle load pressure control</li> <li>- Number of electronic control unit programming</li> <li>- Fuel pump relay</li> <li>- Clutch pedal</li> <li>- Electronic control unit replacement required</li> <li>- Wastegate valve opening counter</li> <li>- Wastegate valve opening time</li> <li>- Speed control signal</li> <li>- Neutral position</li> <li>- Overspeed frequency</li> <li>- Overspeed duration</li> <li>- Injected quantity (total)</li> <li>- Status particle filter</li> <li>- Glow plug actuation</li> <li>- Operating switch speed</li> <li>- Particle filter differential pressure</li> <li>- Oxygen concentration</li> <li>- Average time last 5 regenerations</li> <li>- Average range of the last 5 regenerations</li> <li>- Average range of the last 5 regenerations</li> <li>- Particle filter temperature</li> <li>- Km reading at the last programming</li> <li>- km from the last DPF regeneration</li> <li>- Particle filter, saturation</li> <li>- Intake air initial temperature</li> <li>- Kilometer reading from the last DPF replacement</li> <li>- Var.turb.geom. turbocharger, specified position</li> <li>- Partial regeneration operations count</li> <li>- Mileage on lubrication service warning</li> <li>- Mileage on last overspeed</li> <li>- Number of regeneration requests</li> <li>- VTG turbocharger actual position</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- valve, exhausted gases recirculation</li> <li>- Radiator fan. stage 1</li> <li>- Radiator fan. stage 2</li> <li>- Suction control valve</li> <li>- Engine management system error lights</li> <li>- Oil pressure control light</li> <li>- Charging-air pressure magnetic valve</li> <li>- Cooling agent temperature warning light</li> <li>- Speed control light</li> <li>- Fuel water content light</li> <li>- Glow control light</li> <li>- Cooling agent compressor</li> <li>- Particle filter control light</li> </ul> </li> </ul>
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FIAT						Idea [Fase II] - Idea 1.4 Flex	
Year	Engine	Liters	HP	System	Functions		
2010/08			80 -	Parking assisting system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>		

-	178F3011	1.4	82	Park Distance Control 2.0	<ul style="list-style-type: none"> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul>
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FIAT Idea [Fase II] - Idea 1.6 16V Flex					
Year	Engine	Liters	HP	System	Functions
2010/08 -	310A5011	1.6	116 - 117	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Idea [Fase II] - Idea 1.8 16V Flex					
Year	Engine	Liters	HP	System	Functions
2010/08 -	370A0011	1.8	131 - 132	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Idea [Fase I] - Idea 1.4 Flex					
Year	Engine	Liters	HP	System	Functions
2005/09 - 2010/07	178 F 3.011	1.4	80 - 81	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul>
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FIAT						Idea [Fase I] - Idea 1.8 Flex					
Year	Engine	Liters	HP	System		Functions					
2005/09 - 2010/07	93313090- 7U	1.8	112 - 114	Tire control system Tire pressure monitor 1.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul> </li> </ul>					

FIAT						Linea - Linea 1.4 16V Turbo					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>					

2008/10 - 2012/12	198A1000	1.4	152	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
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FIAT Linea - Linea 1.9 16V Flex					
Year	Engine	Liters	HP	System	Functions
2008/10 - 2010/08	310 A 3.011	1.9	130 - 132	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Linea - Linea 1.9 16V Flex Dualogic					
Year	Engine	Liters	HP	System	Functions
2008/10 - 2010/08	310 A 3.011	1.9	130 - 132	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Linea - Linea 1.8 16V Flex (LX)					
Year	Engine	Liters	HP	System	Functions
2010/09 -	370A0011	1.8	127	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

- Front Park Distance Control

FIAT Linea - Linea 1.8 16V Flex Dualogic (LX)					
Year	Engine	Liters	HP	System	Functions
2010/09 -	370A0011	1.8	127	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"><li>• <b>Identification</b></li><li>• <b>Clear errors</b></li><li>• <b>Adjustments / settings</b><ul style="list-style-type: none"><li>- Read configuration</li><li>- Configuration save</li></ul></li><li>• <b>Error memory</b></li><li>• <b>Current values</b><ul style="list-style-type: none"><li>- Power supply</li><li>- Vehicle driving speed</li><li>- Reverse gear</li><li>- Trailer operation</li><li>- Number of electronic control unit programming</li><li>- Front Park Distance Control</li></ul></li></ul>

FIAT Linea - Linea 1.8 16V Flex					
Year	Engine	Liters	HP	System	Functions
2010/09 -	370A0011	1.8	130 - 132	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"><li>• <b>Identification</b></li><li>• <b>Clear errors</b></li><li>• <b>Adjustments / settings</b><ul style="list-style-type: none"><li>- Read configuration</li><li>- Configuration save</li></ul></li><li>• <b>Error memory</b></li><li>• <b>Current values</b><ul style="list-style-type: none"><li>- Power supply</li><li>- Vehicle driving speed</li><li>- Reverse gear</li><li>- Trailer operation</li><li>- Number of electronic control unit programming</li><li>- Front Park Distance Control</li></ul></li></ul>

FIAT Linea - Linea 1.8 16V Flex Dualogic					
Year	Engine	Liters	HP	System	Functions
2010/09 -	370A0011	1.8	130 - 132	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"><li>• <b>Identification</b></li><li>• <b>Clear errors</b></li><li>• <b>Adjustments / settings</b><ul style="list-style-type: none"><li>- Read configuration</li><li>- Configuration save</li></ul></li><li>• <b>Error memory</b></li><li>• <b>Current values</b><ul style="list-style-type: none"><li>- Power supply</li><li>- Vehicle driving speed</li><li>- Reverse gear</li><li>- Trailer operation</li><li>- Number of electronic control unit programming</li><li>- Front Park Distance Control</li></ul></li></ul>

FIAT Linea - Linea 1.9 16V					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"><li>• <b>Identification</b></li><li>• <b>Clear errors</b></li><li>• <b>Adjustments / settings</b><ul style="list-style-type: none"><li>- Read configuration</li></ul></li></ul>



2008/10 -	310A4011	1.9	132	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>- Configuration save</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
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FIAT					
Linea - Linea 1.8					
Year	Engine	Liters	HP	System	Functions
2011/04 -		1.8	126	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT					
Linea [110] - Linea 1.4 16V					
Year	Engine	Liters	HP	System	Functions
2008/11 -	199 A6.000	1.4	90	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT					
Linea [110] - Linea 1.3 JTD					
Year	Engine	Liters	HP	System	Functions
2008/12 -	199 A3.000	1.3	86	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Linea [110] - Linea 1.4 i.e. 16V					
Year	Engine	Liters	HP	System	Functions
2008/12 -	199 A3.000	1.4	90	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Linea [323] - Linea 1.4					
Year	Engine	Liters	HP	System	Functions
2007/03 -	350 A1.000	1.4	77	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Linea [323] - Linea 1.4 Turbo					
Year	Engine	Liters	HP	System	Functions
2007/03 -	198 A4.000	1.4	120	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Linea [323] - Linea 1.3 Multijet					
Year	Engine	Liters	HP	System	Functions
2007/03 -	199 A3.000	1.3	90	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

					<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul>
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FIAT Linea [323] - Linea 1.6 Multijet					
Year	Engine	Liters	HP	System	Functions
2008/10 -	198 A3.000	1.6	105	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Panda '03 [169] - Panda 1.2 i.e. LPG					
Year	Engine	Liters	HP	System	Functions
2006/12 - 2009/12	188 A4.000	1.2	52 - 60	Engine control Landi Renzo LC02	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Coolant temperature</li> <li>- Engine revolution</li> <li>- emergency switch off</li> <li>- electric fuel pump</li> <li>- Engine status</li> <li>- Control unit, internal relay</li> <li>- Injection time, cylinder 1</li> <li>- Injection time, cylinder 2</li> <li>- Injection time, cylinder 3</li> <li>- Injection time, cylinder 4</li> <li>- Fuel feeding stop</li> <li>- LPG operation</li> <li>- Petrol operation</li> <li>- Liquefied petroleum gas level warning lamp</li> <li>- Liquefied petroleum gas switch</li> <li>- Gas tank level</li> <li>- Operating time</li> <li>- Gas switching waiting time</li> <li>- Gas shut-off valve current input</li> <li>- Control unit temperature</li> <li>- Dry-running operation function</li> <li>- Fuel mode requested</li> <li>- Fuel mode</li> <li>- Current at the fuel pump</li> <li>- Gas rail temperature</li> <li>- Gas rail pressure</li> <li>- Gas shut-off valve</li> <li>- Injection time/cylinder 1</li> <li>- Injection time/cylinder 2</li> <li>- Injection time/cylinder 3</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Injection time/cylinder 4</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- emergency switch off</li> <li>- electrical fuel pump relay</li> <li>- Liquefied petroleum gas indicator lamp</li> <li>- Injection valve Cylinder 1</li> <li>- Injection valve Cylinder 2</li> <li>- Injection valve Cylinder 3</li> <li>- Injection valve Cylinder 4</li> <li>- Gas shut-off valve</li> <li>- Operating mode indicator lamp</li> </ul> </li> </ul>
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<b>FIAT</b>	<b>Panda '03 [169] - Panda 1.3 JTD</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Throttle valve test</li> <li>- Quantities comparison</li> <li>- Glow plug test</li> <li>- Exhaust gas recirculation system test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Injector quantity adjustment</li> <li>- Reset Lambda sensor adaptation values</li> <li>- HFM adaption reset</li> <li>- Rail pressure sensor adjustment</li> <li>- Differential pressure sensor adjustment</li> <li>- Neutral position initialization</li> <li>- Reset after replacement of additive filter</li> <li>- Turbocharger basic setting</li> <li>- Reset mileage with coolant temp. warnng light ON</li> <li>- Reset mileage with fuel water cont. lamp ON</li> <li>- Reset A/C /cruise control parameters</li> <li>- Reset after speed trigger wheel replacement</li> <li>- Reset after wastegate valve replacement</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Diesel particulate filter regeneration run</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Oil quality</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Mileage</li> <li>- throttle valve position</li> <li>- Fuel temperature</li> <li>- Coolant temperature</li> <li>- Engine control unit</li> <li>- Engine revolution</li> <li>- atmospheric pressure</li> <li>- Exhausted gases recirculation</li> <li>- Lights switch 2</li> <li>- Exceeding the max revolution</li> <li>- Rail pressure, nominal</li> <li>- Rail pressure, actual</li> <li>- Air mass, nominal value</li> <li>- Air mass, actual value</li> <li>- Turbo pressure, nominal value</li> <li>- Turbo pressure, actual value</li> <li>- Starter activation</li> <li>- Acceleration pedal position sensor 1</li> <li>- Acceleration pedal position sensor 2</li> <li>- Fuel quantity metering device pulse-duty factor</li> <li>- Start permission</li> </ul> </li> </ul>

2006/05 - 2009/12	169 A1.000	1.3	75	Engine control Diesel EDC 8DF CF5	<ul style="list-style-type: none"> <li>- Throttle valve required position</li> <li>- Air conditioner status</li> <li>- Gear box transmission identification</li> <li>- Last oil change</li> <li>- Cooling agent pressure</li> <li>- Cooling agent compressor</li> <li>- Brake pedal</li> <li>- Throttle actuator</li> <li>- Final intake temperature</li> <li>- EGR cooling bypass solenoid valve</li> <li>- Mileage since temperature indicator lamp on</li> <li>- Mileage since fuel water content lamp on</li> <li>- Mileage with DPF indicator lamp ON</li> <li>- Clutch pedal stop</li> <li>- Start/stop release by Central electronics</li> <li>- Start/stop function</li> <li>- Start/stop function status</li> <li>- Start/stop activation prohibition</li> <li>- Brake booster switch</li> <li>- Duty cycle load pressure control</li> <li>- Number of electronic control unit programming</li> <li>- Fuel pump relay</li> <li>- Clutch pedal</li> <li>- Electronic control unit replacement required</li> <li>- Wastegate valve opening counter</li> <li>- Wastegate valve opening time</li> <li>- Speed control signal</li> <li>- Neutral position</li> <li>- Overspeed frequency</li> <li>- Overspeed duration</li> <li>- Injected quantity (total)</li> <li>- Status particle filter</li> <li>- Glow plug actuation</li> <li>- Operating switch speed</li> <li>- Particle filter differential pressure</li> <li>- Oxygen concentration</li> <li>- Average time last 5 regenerations</li> <li>- Average range of the last 5 regenerations</li> <li>- Average range of the last 5 regenerations</li> <li>- Particle filter temperature</li> <li>- Km reading at the last programming</li> <li>- km from the last DPF regeneration</li> <li>- Particle filter, saturation</li> <li>- Intake air initial temperature</li> <li>- Kilometer reading from the last DPF replacement</li> <li>- Var.turb.geom. turbocharger, specified position</li> <li>- Partial regeneration operations count</li> <li>- Mileage on lubrication service warning</li> <li>- Mileage on last overspeed</li> <li>- Number of regeneration requests</li> <li>- VTG turbocharger actual position</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- valve, exhausted gases recirculation</li> <li>- Radiator fan. stage 1</li> <li>- Radiator fan. stage 2</li> <li>- Suction control valve</li> <li>- Engine management system error lights</li> <li>- Oil pressure control light</li> <li>- Charging-air pressure magnetic valve</li> <li>- Cooling agent temperature warning light</li> <li>- Speed control light</li> <li>- Fuel water content light</li> <li>- Glow control light</li> <li>- Cooling agent compressor</li> <li>- Particle filter control light</li> </ul> </li> </ul>
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FIAT Panda '09 [169] - Panda 1.2 LPG					
Year	Engine	Liters	HP	System	Functions
2009/01 - 2012/12	188 A4.000	1.2	60	Engine control Landi Renzo LC02	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Coolant temperature</li> <li>- Engine revolution</li> <li>- emergency switch off</li> <li>- electric fuel pump</li> <li>- Engine status</li> <li>- Control unit, internal relay</li> <li>- Injection time, cylinder 1</li> <li>- Injection time, cylinder 2</li> <li>- Injection time, cylinder 3</li> <li>- Injection time, cylinder 4</li> <li>- Fuel feeding stop</li> <li>- LPG operation</li> <li>- Petrol operation</li> <li>- Liquefied petroleum gas level warning lamp</li> <li>- Liquefied petroleum gas switch</li> <li>- Gas tank level</li> <li>- Operating time</li> <li>- Gas switching waiting time</li> <li>- Gas shut-off valve current input</li> <li>- Control unit temperature</li> <li>- Dry-running operation function</li> <li>- Fuel mode requested</li> <li>- Fuel mode</li> <li>- Current at the fuel pump</li> <li>- Gas rail temperature</li> <li>- Gas rail pressure</li> <li>- Gas shut-off valve</li> <li>- Injection time/cylinder 1</li> <li>- Injection time/cylinder 2</li> <li>- Injection time/cylinder 3</li> <li>- Injection time/cylinder 4</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- emergency switch off</li> <li>- electrical fuel pump relay</li> <li>- Liquefied petroleum gas indicator lamp</li> <li>- Injection valve Cylinder 1</li> <li>- Injection valve Cylinder 2</li> <li>- Injection valve Cylinder 3</li> <li>- Injection valve Cylinder 4</li> <li>- Gas shut-off valve</li> <li>- Operating mode indicator lamp</li> </ul> </li> </ul>

FIAT Panda '09 [169] - Panda 1.3 JTD					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Throttle valve test</li> <li>- Quantities comparison</li> <li>- Glow plug test</li> <li>- Exhaust gas recirculation system test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Injector quantity adjustment</li> <li>- Reset Lambda sensor adaptation values</li> </ul> </li> </ul>

2009/01  
-  
2010/09

188 A8.000

1.3

71

Engine control  
Diesel EDC 8DF CF5

- HFM adaption reset
- Rail pressure sensor adjustment
- Differential pressure sensor adjustment
- Neutral position initialization
- Reset after replacement of additive filter
- Turbocharger basic setting
- Reset mileage with coolant temp. warnng light ON
- Reset mileage with fuel water cont. lamp ON
- Reset A/C /cruise control parameters
- Reset after speed trigger wheel replacement
- Reset after wastegate valve replacement
- **Special functions**
  - Fuel tank emptying
  - Diesel particulate filter regeneration run
- **Error memory**
- **Current values**
  - Power supply
  - Oil quality
  - Vehicle driving speed
  - Accelerator pedal position
  - Mileage
  - throttle valve position
  - Fuel temperature
  - Coolant temperature
  - Engine control unit
  - Engine revolution
  - atmospheric pressure
  - Exhausted gases recirculation
  - Lights switch 2
  - Exceeding the max revolution
  - Rail pressure, nominal
  - Rail pressure, actual
  - Air mass, nominal value
  - Air mass, actual value
  - Turbo pressure, nominal value
  - Turbo pressure, actual value
  - Starter activation
  - Acceleration pedal position sensor 1
  - Acceleration pedal position sensor 2
  - Fuel quantity metering device pulse-duty factor
  - Start permission
  - Throttle valve required position
  - Air conditioner status
  - Gear box transmission identification
  - Last oil change
  - Cooling agent pressure
  - Cooling agent compressor
  - Brake pedal
  - Throttle actuator
  - Final intake temperature
  - EGR cooling bypass solenoid valve
  - Mileage since temperature indicator lamp on
  - Mileage since fuel water content lamp on
  - Mileage with DPF indicator lamp ON
  - Clutch pedal stop
  - Start/stop release by Central electronics
  - Start/stop function
  - Start/stop function status
  - Start/stop activation prohibition
  - Brake booster switch
  - Duty cycle load pressure control
  - Number of electronic control unit programming
  - Fuel pump relay
  - Clutch pedal
  - Electronic control unit replacement required
  - Wastegate valve opening counter
  - Wastegate valve opening time
  - Speed control signal

					<ul style="list-style-type: none"> <li>- Neutral position</li> <li>- Overspeed frequency</li> <li>- Overspeed duration</li> <li>- Injected quantity (total)</li> <li>- Status particle filter</li> <li>- Glow plug actuation</li> <li>- Operating switch speed</li> <li>- Particle filter differential pressure</li> <li>- Oxygen concentration</li> <li>- Average time last 5 regenerations</li> <li>- Average range of the last 5 regenerations</li> <li>- Average range of the last 5 regenerations</li> <li>- Particle filter temperature</li> <li>- Km reading at the last programming</li> <li>- km from the last DPF regeneration</li> <li>- Particle filter, saturation</li> <li>- Intake air initial temperature</li> <li>- Kilometer reading from the last DPF replacement</li> <li>- Var.turb.geom. turbocharger, specified position</li> <li>- Partial regeneration operations count</li> <li>- Mileage on lubrication service warning</li> <li>- Mileage on last overspeed</li> <li>- Number of regeneration requests</li> <li>- VTG turbocharger actual position</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- valve, exhausted gases recirculation</li> <li>- Radiator fan. stage 1</li> <li>- Radiator fan. stage 2</li> <li>- Suction control valve</li> <li>- Engine management system error lights</li> <li>- Oil pressure control light</li> <li>- Charging-air pressure magnetic valve</li> <li>- Cooling agent temperature warning light</li> <li>- Speed control light</li> <li>- Fuel water content light</li> <li>- Glow control light</li> <li>- Cooling agent compressor</li> <li>- Particle filter control light</li> </ul>
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FIAT						Panda '09 [169] - Panda 1.3 JTD 4x4					
Year	Engine	Liters	HP	System	Functions						
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Throttle valve test</li> <li>- Quantities comparison</li> <li>- Glow plug test</li> <li>- Exhaust gas recirculation system test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Injector quantity adjustment</li> <li>- Reset Lambda sensor adaptation values</li> <li>- HFM adaption reset</li> <li>- Rail pressure sensor adjustment</li> <li>- Differential pressure sensor adjustment</li> <li>- Neutral position initialization</li> <li>- Reset after replacement of additive filter</li> <li>- Turbocharger basic setting</li> <li>- Reset mileage with coolant temp. warnng light ON</li> <li>- Reset mileage with fuel water cont. lamp ON</li> <li>- Reset A/C /cruise control parameters</li> <li>- Reset after speed trigger wheel replacement</li> <li>- Reset after wastegate valve replacement</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> </ul> </li> </ul>						



2009/01 - 2010/09	188 A8.000	1.3	71	Engine control Diesel EDC 8DF CF5	<ul style="list-style-type: none"> <li>- Diesel particulate filter regeneration run</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Oil quality</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Mileage</li> <li>- throttle valve position</li> <li>- Fuel temperature</li> <li>- Coolant temperature</li> <li>- Engine control unit</li> <li>- Engine revolution</li> <li>- atmospheric pressure</li> <li>- Exhausted gases recirculation</li> <li>- Lights switch 2</li> <li>- Exceeding the max revolution</li> <li>- Rail pressure, nominal</li> <li>- Rail pressure, actual</li> <li>- Air mass, nominal value</li> <li>- Air mass, actual value</li> <li>- Turbo pressure, nominal value</li> <li>- Turbo pressure, actual value</li> <li>- Starter activation</li> <li>- Acceleration pedal position sensor 1</li> <li>- Acceleration pedal position sensor 2</li> <li>- Fuel quantity metering device pulse-duty factor</li> <li>- Start permission</li> <li>- Throttle valve required position</li> <li>- Air conditioner status</li> <li>- Gear box transmission identification</li> <li>- Last oil change</li> <li>- Cooling agent pressure</li> <li>- Cooling agent compressor</li> <li>- Brake pedal</li> <li>- Throttle actuator</li> <li>- Final intake temperature</li> <li>- EGR cooling bypass solenoid valve</li> <li>- Mileage since temperature indicator lamp on</li> <li>- Mileage since fuel water content lamp on</li> <li>- Mileage with DPF indicator lamp ON</li> <li>- Clutch pedal stop</li> <li>- Start/stop release by Central electronics</li> <li>- Start/stop function</li> <li>- Start/stop function status</li> <li>- Start/stop activation prohibition</li> <li>- Brake booster switch</li> <li>- Duty cycle load pressure control</li> <li>- Number of electronic control unit programming</li> <li>- Fuel pump relay</li> <li>- Clutch pedal</li> <li>- Electronic control unit replacement required</li> <li>- Wastegate valve opening counter</li> <li>- Wastegate valve opening time</li> <li>- Speed control signal</li> <li>- Neutral position</li> <li>- Overspeed frequency</li> <li>- Overspeed duration</li> <li>- Injected quantity (total)</li> <li>- Status particle filter</li> <li>- Glow plug actuation</li> <li>- Operating switch speed</li> <li>- Particle filter differential pressure</li> <li>- Oxygen concentration</li> <li>- Average time last 5 regenerations</li> <li>- Average range of the last 5 regenerations</li> <li>- Average range of the last 5 regenerations</li> <li>- Particle filter temperature</li> </ul>
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					<ul style="list-style-type: none"> <li>- Km reading at the last programming</li> <li>- km from the last DPF regeneration</li> <li>- Particle filter, saturation</li> <li>- Intake air initial temperature</li> <li>- Kilometer reading from the last DPF replacement</li> <li>- Var.turb.geom. turbocharger, specified position</li> <li>- Partial regeneration operations count</li> <li>- Mileage on lubrication service warning</li> <li>- Mileage on last overspeed</li> <li>- Number of regeneration requests</li> <li>- VTG turbocharger actual position</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- valve, exhausted gases recirculation</li> <li>- Radiator fan. stage 1</li> <li>- Radiator fan. stage 2</li> <li>- Suction control valve</li> <li>- Engine management system error lights</li> <li>- Oil pressure control light</li> <li>- Charging-air pressure magnetic valve</li> <li>- Cooling agent temperature warning light</li> <li>- Speed control light</li> <li>- Fuel water content light</li> <li>- Glow control light</li> <li>- Cooling agent compressor</li> <li>- Particle filter control light</li> </ul>
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FIAT					
Punto '12 [199] - Punto 1.4 LPG					
Year	Engine	Liters	HP	System	Functions
2012/01 -	350 A1.000	1.4	78	Engine control Landi Renzo LC02	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Coolant temperature</li> <li>- Engine revolution</li> <li>- emergency switch off</li> <li>- electric fuel pump</li> <li>- Engine status</li> <li>- Control unit, internal relay</li> <li>- Injection time, cylinder 1</li> <li>- Injection time, cylinder 2</li> <li>- Injection time, cylinder 3</li> <li>- Injection time, cylinder 4</li> <li>- Fuel feeding stop</li> <li>- LPG operation</li> <li>- Petrol operation</li> <li>- Liquefied petroleum gas level warning lamp</li> <li>- Liquefied petroleum gas switch</li> <li>- Gas tank level</li> <li>- Operating time</li> <li>- Gas switching waiting time</li> <li>- Gas shut-off valve current input</li> <li>- Control unit temperature</li> <li>- Dry-running operation function</li> <li>- Fuel mode requested</li> <li>- Fuel mode</li> <li>- Current at the fuel pump</li> <li>- Gas rail temperature</li> <li>- Gas rail pressure</li> <li>- Gas shut-off valve</li> <li>- Injection time/cylinder 1</li> <li>- Injection time/cylinder 2</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Injection time/cylinder 3</li> <li>- Injection time/cylinder 4</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- emergency switch off</li> <li>- electrical fuel pump relay</li> <li>- Liquefied petroleum gas indicator lamp</li> <li>- Injection valve Cylinder 1</li> <li>- Injection valve Cylinder 2</li> <li>- Injection valve Cylinder 3</li> <li>- Injection valve Cylinder 4</li> <li>- Gas shut-off valve</li> <li>- Operating mode indicator lamp</li> </ul> </li> </ul>
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FIAT					
Punto Evo [199] - Punto Evo 1.4 LPG					
Year	Engine	Liters	HP	System	Functions
2009/10 - 2011/12	350 A1.000	1.4	76	Engine control Landi Renzo LC02	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Coolant temperature</li> <li>- Engine revolution</li> <li>- emergency switch off</li> <li>- electric fuel pump</li> <li>- Engine status</li> <li>- Control unit, internal relay</li> <li>- Injection time, cylinder 1</li> <li>- Injection time, cylinder 2</li> <li>- Injection time, cylinder 3</li> <li>- Injection time, cylinder 4</li> <li>- Fuel feeding stop</li> <li>- LPG operation</li> <li>- Petrol operation</li> <li>- Liquefied petroleum gas level warning lamp</li> <li>- Liquefied petroleum gas switch</li> <li>- Gas tank level</li> <li>- Operating time</li> <li>- Gas switching waiting time</li> <li>- Gas shut-off valve current input</li> <li>- Control unit temperature</li> <li>- Dry-running operation function</li> <li>- Fuel mode requested</li> <li>- Fuel mode</li> <li>- Current at the fuel pump</li> <li>- Gas rail temperature</li> <li>- Gas rail pressure</li> <li>- Gas shut-off valve</li> <li>- Injection time/cylinder 1</li> <li>- Injection time/cylinder 2</li> <li>- Injection time/cylinder 3</li> <li>- Injection time/cylinder 4</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- emergency switch off</li> <li>- electrical fuel pump relay</li> <li>- Liquefied petroleum gas indicator lamp</li> <li>- Injection valve Cylinder 1</li> <li>- Injection valve Cylinder 2</li> <li>- Injection valve Cylinder 3</li> <li>- Injection valve Cylinder 4</li> <li>- Gas shut-off valve</li> <li>- Operating mode indicator lamp</li> </ul> </li> </ul>

FIAT Punto [118] - Punto 1.4 Flex					
Year	Engine	Liters	HP	System	Functions
2007/08 - 2010/06	310 A 2.011	1.4	85 - 86	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
2010/07 - 2012/07	310A2011	1.4	85 - 86	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
2012/08 -	327A011	1.4	0	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Punto [118] - Punto 1.8 Flex					
Year	Engine	Liters	HP	System	Functions
2007/08 - 2010/06	J2	1.8	112 - 114	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT Punto [118] - Punto 1.4					
Year	Engine	Liters	HP	System	Functions

Year	Engine	Liters	HP	System	Functions
2007/08 - 2012/07		1.4	87	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
2010/08 - 2012/07		1.4	87	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

<b>FIAT</b>						<b>Punto [118] - Punto 1.8</b>					
Year	Engine	Liters	HP	System	Functions						
2007/08 - 2012/07		1.8	110	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>						

<b>FIAT</b>						<b>Punto [118] - Punto 1.4 16V T-Jet</b>					
Year	Engine	Liters	HP	System	Functions						
2009/02 - 2012/07	198A1000	1.4	152	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>						

2012/08 -	1.4	152	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
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FIAT						Punto [118] - Punto 1.6 16V Flex					
Year	Engine	Liters	HP	System		Functions					
2010/07 - 2012/07	310A5011	1.6	115 - 117	Parking assisting system Park Distance Control 2.3		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>					
2012/08 -		1.6	115 - 117	Parking assisting system Park Distance Control 2.3		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>					

FIAT						Punto [118] - Punto 1.8 16V Flex					
Year	Engine	Liters	HP	System		Functions					
2010/07 - 2012/07	370A0011	1.8	130 - 132	Parking assisting system Park Distance Control 2.3		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>					
						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>					

2012/08 -		1.8	130 - 132	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
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FIAT					
Punto [118] - Punto 1.6 16V					
Year	Engine	Liters	HP	System	Functions
2010/08 - 2012/07	310A5011	1.6	115	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT					
Punto [118] - Punto 1.3 16V JTD					
Year	Engine	Liters	HP	System	Functions
2008/07 - 2012/07	199 A3.000	1.3	69	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

FIAT					
Qubo [300] - Qubo 1.3 Multijet					
Year	Engine	Liters	HP	System	Functions
2008/09 -	199 A2.000	1.3	75	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

2010/09 -	199 B1.000	1.3	95	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>
2010/06 -	199 A9.000	1.3	75	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

FIAT					
Qubo [300] - Qubo 1.4					
Year	Engine	Liters	HP	System	Functions
2008/09 -	KFV	1.4	73 - 75	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>
2010/06 -	KFT	1.4	73	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

FIAT					
Qubo [300] - Qubo 1.4 Natural Power					
Year	Engine	Liters	HP	System	Functions
2009/10			69 -	Parking assisting system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> </ul>



-	350 A1.000	1.4	78	Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul>
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FIAT						Scudo '07 [270] - Scudo 1.6 D Multijet					
Year	Engine	Liters	HP	System		Functions					
2007/01 -	9HU	1.6	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supple./auxiliary heater fuel pump</li> <li>• <b>Actuators</b></li> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>					
2012/03 -	9H07	1.6	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supple./auxiliary heater fuel pump</li> <li>• <b>Actuators</b></li> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>					

FIAT						Scudo '07 [270] - Scudo 2.0 D Multijet					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>					

2007/01 -	RHK	2.0	120	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
2008/10 -	RHG	2.0	120	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
2011/04 -	RH02	2.0	128	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

FIAT Scudo '07 [270] - Scudo 2.0					
Year	Engine	Liters	HP	System	Functions
2007/03 -	RFH	2.0	140	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

FIAT Stilo - Stilo 1.8 MPI 8V					
Year	Engine	Liters	HP	System	Functions
2002/06 - 2005/09	7D	1.8	103	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Stilo - Stilo 1.8 MPI 16V					
Year	Engine	Liters	HP	System	Functions
2002/06 - 2004/12	8D	1.8	122	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Stilo - Stilo 2.4 MPI 20V					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

2002/06 - 2008/12	192 A7.011	2.4	167	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
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FIAT Stilo - Stilo 1.8 MPI 8V Flex					
Year	Engine	Liters	HP	System	Functions
2005/10 - 2010/11	93337154J1	1.8	112 - 114	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Stilo - Stilo 1.8 MPI 8V Flex Dualogic					
Year	Engine	Liters	HP	System	Functions
2008/02 - 2010/11	Y1	1.8	112 - 114	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Stilo '01 [192] - Stilo 1.6 16V					
Year	Engine	Liters	HP	System	Functions
2001/10 - 2003/12	182 B6.000	1.6	103	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Stilo '01 [192] - Stilo 2.4 20V					
Year	Engine	Liters	HP	System	Functions
2001/10				Parking assisting system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>

- 2003/12	192 A2.000	2.4	170	Park Distance Control 2.0	<ul style="list-style-type: none"> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul>
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FIAT Stilo '01 [192] - Stilo 1.9 JTD 8V					
Year	Engine	Liters	HP	System	Functions
2001/10 - 2003/12	192 A1.000	1.9	115	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Stilo '01 [192] - Stilo 1.8 16V					
Year	Engine	Liters	HP	System	Functions
2001/10 - 2003/12	192 A4.000	1.8	133	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Stilo '04 [192] - Stilo 1.6 16V					
Year	Engine	Liters	HP	System	Functions
2004/01 - 2007/12	182 B6.000	1.6	103	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2005/07 - 2007/12	192 B3.000	1.6	105	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Stilo '04 [192] - Stilo 1.9 JTD 8V					
Year	Engine	Liters	HP	System	Functions

Year	Engine	Liters	HP	System	Functions
2004/01 - 2007/12	192 A1.000	1.9	115	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2005/07 - 2007/12	192 A8.000	1.9	120	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Stilo '04 [192] - Stilo 1.8 16V					
Year	Engine	Liters	HP	System	Functions
2004/01 - 2007/12	192 A4.000	1.8	133	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Stilo '04 [192] - Stilo 1.9 JTD 16V					
Year	Engine	Liters	HP	System	Functions
2004/01 - 2007/12	192 A5.000	1.9	140	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2005/07 - 2007/12	937 A5.000	1.9	150	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Stilo '04 [192] - Stilo 1.4 16V					
Year	Engine	Liters	HP	System	Functions
2004/01 - 2007/12	192 B2.000	1.4	90	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Stilo Multi Wagon [192] - Stilo 1.8 16V S.W.					
Year	Engine	Liters	HP	System	Functions
2002/10 - 2007/12	192 A4.000	1.8	133	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Stilo Multi Wagon [192] - Stilo 1.6 16V S.W.					
Year	Engine	Liters	HP	System	Functions
2002/10 - 2007/12	182 B6.000	1.6	103	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2005/07 - 2007/12	192 B3.000	1.6	105	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

FIAT Stilo Multi Wagon [192] - Stilo 1.9 JTD 8V S.W.					
Year	Engine	Liters	HP	System	Functions
2002/10				Parking assisting system	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>

- 2007/12	192 A1.000	1.9	115	Park Distance Control 2.0	<ul style="list-style-type: none"> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul>
2004/09 - 2007/12	192 A9.000	1.9	100	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2005/07 - 2007/12	192 A8.000	1.9	120	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

<b>FIAT Stilo Multi Wagon [192] - Stilo 1.4 16V S.W.</b>					
Year	Engine	Liters	HP	System	Functions
2004/01 - 2007/12	843 A1.000	1.4	95	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2004/09 - 2007/12	192 B2.000	1.4	90	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

<b>FIAT Stilo Multi Wagon [192] - Stilo 1.9 JTD 16V S.W.</b>					
Year	Engine	Liters	HP	System	Functions
2004/01 - 2007/12	192 A5.000	1.9	140	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Trailer operation</li> <li>- System</li> </ul>
2004/09 - 2007/12	192 B1.000	1.9	136	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2005/07 - 2007/12	937 A5.000	1.9	150	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

<b>FIAT Stilo Multi Wagon [192] - Stilo 2.4 20V S.W.</b>					
Year	Engine	Liters	HP	System	Functions
2004/01 - 2007/12	192 A2.000	2.4	170	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

<b>FIAT Ulysse '03 [179] - Ulysse 2.0 16V</b>					
Year	Engine	Liters	HP	System	Functions
2002/10 - 2005/10	RFN	2.0	136	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> </ul> </li> </ul>

- Fuel metering valve

FIAT						Ulysse '03 [179] - Ulysse 2.0 16V JTD					
Year	Engine	Liters	HP	System	Functions						
2002/10 - 2006/01	RHW	2.0	109	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>						
2003/06 - 2006/01	RHM	2.0	107	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>						
2006/02 - 2010/12	RHK	2.0	120	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> </ul> </li> </ul>						

					<ul style="list-style-type: none"> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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**FIAT Ulysse '03 [179] - Ulysse 2.2 16V JTD**

Year	Engine	Liters	HP	System	Functions
2002/10 - 2007/09	4HW	2.2	128	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
2007/10 - 2010/12	4H...	2.2	163	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

**FIAT Ulysse '03 [179] - Ulysse 3.0 V6 24V**

Year	Engine	Liters	HP	System	Functions
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2003/01 - 2005/10	XFW	3.0	204	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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[C-MAX '07 \[DM2\] - C-MAX 1.6](#)  
[C-MAX '07 \[DM2\] - C-MAX 1.8](#)  
[C-MAX '07 \[DM2\] - C-MAX 1.8 FFV](#)  
[C-MAX '07 \[DM2\] - C-MAX 2.0](#)  
[C-MAX '07 \[DM2\] - C-MAX 1.6 TDCi](#)  
[C-MAX '07 \[DM2\] - C-MAX 2.0 TDCi](#)  
[C-MAX '07 \[DM2\] - C-MAX 2.0 CNG](#)  
[C-MAX '07 \[DM2\] - C-MAX 1.8 TDCi](#)  
[C-MAX '07 \[DM2\] - C-MAX 2.0 LPG](#)  
[C-MAX '11 \[DXA\] - C-MAX 1.6 Ti-VCT](#)  
[C-MAX '11 \[DXA\] - C-MAX 1.6 Ti-VCT FlexiFuel](#)  
[C-MAX '11 \[DXA\] - C-MAX 1.6 EcoBoost](#)  
[C-MAX '11 \[DXA\] - C-MAX 1.6 TDCi](#)  
[C-MAX '11 \[DXA\] - C-MAX 2.0 TDCi](#)  
[C-MAX '11 \[DXA\] - C-MAX 1.0 EcoBoost](#)  
[Fiesta - Fiesta 1.6](#)  
[Fiesta '08 \[JD, JH\] - Fiesta 1.25i](#)  
[Fiesta '08 \[JD, JH\] - Fiesta 1.4i](#)  
[Fiesta '08 \[JD, JH\] - Fiesta 1.6 Ti-VCT](#)  
[Fiesta '08 \[JD, JH\] - Fiesta 1.4 TDCi](#)  
[Fiesta '08 \[JD, JH\] - Fiesta 1.6 TDCi](#)  
[Fiesta '08 \[JD, JH\] - Fiesta 1.4 LPG](#)  
[Fiesta '08 \[JD, JH\] - Fiesta 1.6 Ti-VCT Sport S](#)  
[Fiesta '13 \[JA8, JR8\] - Fiesta 1.4 LPG](#)  
[Fiesta '13 \[JA8, JR8\] - Fiesta 1.4](#)  
[Fiesta \[B252-299\] - Fiesta 1.4i](#)  
[Focus '04 - Focus 1.8i](#)  
[Focus '04 \[DA3\] - Focus 1.6i](#)  
[Focus '04 \[DA3\] - Focus 1.6 Ti-VCT](#)  
[Focus '04 \[DA3\] - Focus 2.0i](#)  
[Focus '04 \[DA3\] - Focus 1.6 TDCi](#)  
[Focus '04 \[DA3\] - Focus 2.0 TDCi](#)  
[Focus '04 \[DA3\] - Focus 1.8 TDCi](#)  
[Focus '04 \[DA3\] - Focus 2.5i ST](#)  
[Focus '04 \[DA3\] - Focus 1.8 FFV](#)  
[Focus '04 \[DA3\] - Focus 1.8i](#)  
[Focus '04 \[DA3\] Turnier - Focus 1.6 TDCi Turnier](#)  
[Focus '04 \[DA3\] Turnier - Focus 1.6 Ti-VCT Turnier](#)  
[Focus '04 \[DA3\] Turnier - Focus 1.6i Turnier](#)  
[Focus '04 \[DA3\] Turnier - Focus 2.0 TDCi Turnier](#)  
[Focus '04 \[DA3\] Turnier - Focus 2.0i Turnier](#)  
[Focus '04 \[DA3\] Turnier - Focus 1.8 TDCi Turnier](#)  
[Focus '04 \[DA3\] Turnier - Focus 1.8 FFV Turnier](#)  
[Focus '04 \[DA3\] Turnier - Focus 1.8i Turnier](#)  
[Focus '04 \[DB3\] - Focus 1.6 Ti-VCT](#)  
[Focus '04 \[DB3\] - Focus 1.6i](#)

[Focus '04 \[DB3\] - Focus 2.0 TDCi](#)  
[Focus '04 \[DB3\] - Focus 2.0i](#)  
[Focus '04 \[DB3\] - Focus 1.8 TDCi](#)  
[Focus '04 \[DB3\] - Focus 1.8 FFV](#)  
[Focus '04 \[DB3\] - Focus 1.8i](#)  
[Focus '08 \[FF\] Turnier - Focus 1.6 Ti-VCT Turnier](#)  
[Focus '11 \[DYA, DYB\] - Focus 1.6 Ti-VCT](#)  
[Focus '11 \[DYA, DYB\] - Focus 1.6 EcoBoost](#)  
[Focus '11 \[DYA, DYB\] - Focus 1.6 TDCi](#)  
[Focus '11 \[DYA, DYB\] - Focus 2.0 TDCi](#)  
[Focus '11 \[DYA, DYB\] - Focus 1.6 Ti-VCT FlexiFuel](#)  
[Focus '11 \[DYA, DYB\] - Focus 2.0 GDI Ti-VCT](#)  
[Focus '11 \[DYA, DYB\] - Focus 1.0 EcoBoost](#)  
[Focus '11 \[DYA, DYB\] - Focus 1.6 TDCi ECONetic](#)  
[Focus '11 \[DYA, DYB\] - Focus 2.0 EcoBoost ST](#)  
[Focus '11 \[DYA, DYB\] Turnier - Focus 1.6 EcoBoost Turnier](#)  
[Focus '11 \[DYA, DYB\] Turnier - Focus 1.6 TDCi Turnier](#)  
[Focus '11 \[DYA, DYB\] Turnier - Focus 1.6 Ti-VCT Turnier](#)  
[Focus '11 \[DYA, DYB\] Turnier - Focus 2.0 TDCi Turnier](#)  
[Focus '11 \[DYA, DYB\] Turnier - Focus 1.6 Ti-VCT FlexiFuel Turnier](#)  
[Focus '11 \[DYA, DYB\] Turnier - Focus 1.0 EcoBoost Turnier](#)  
[Focus '11 \[DYA, DYB\] Turnier - Focus 1.6 TDCi ECONetic Turnier](#)  
[Focus '11 \[DYA, DYB\] Turnier - Focus 2.0 EcoBoost ST Turnier](#)  
[Focus '11 \[DYA, DYB\] Turnier - Focus 2.0 GDI Ti-VCT Turnier](#)  
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 1.6](#)  
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 1.8](#)  
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 1.6 TDCi](#)  
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 2.0 TDCi](#)  
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 2.0](#)  
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 1.6 Ti-VCT](#)  
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 1.8 TDCi](#)  
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 1.8 FFV](#)  
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 2.0 CNG](#)  
[Focus \[Fase II\] - Focus 1.6i 16V Flex](#)  
[Focus \[Fase II\] - Focus Sedan 1.6i 16V Flex](#)  
[Fusion - Fusion 1.6 Diesel Turbo 8V](#)  
[Fusion - Fusion 1.4 Diesel 8V](#)  
[Galaxy '06 \[WA6\] - Galaxy 2.0](#)  
[Galaxy '06 \[WA6\] - Galaxy 1.8 TDCi](#)  
[Galaxy '06 \[WA6\] - Galaxy 2.0 TDCi](#)  
[Galaxy '06 \[WA6\] - Galaxy 2.3](#)  
[Galaxy '06 \[WA6\] - Galaxy 2.2 TDCi](#)  
[Galaxy '06 \[WA6\] - Galaxy 2.0 FlexiFuel](#)  
[Galaxy '06 \[WA6\] - Galaxy 2.0 EcoBoost SCTi](#)  
[Galaxy '06 \[WA6\] - Galaxy 1.6 EcoBoost](#)  
[Galaxy '06 \[WA6\] - Galaxy 1.6 TDCi](#)  
[Kuga '08 \[DM2\] - Kuga 2.0 TDCi](#)  
[Kuga '08 \[DM2\] - Kuga 2.0 TDCi 4x4](#)

[Kuga '08 \[DM2\] - Kuga 2.5i 4x4](#)  
[Kuga '13 \[DM2\] - Kuga 2.0 TDCi](#)  
[Kuga '13 \[DM2\] - Kuga 2.0 TDCi 4x4](#)  
[Kuga '13 \[DM2\] - Kuga 1.6 EcoBoost](#)  
[Kuga '13 \[DM2\] - Kuga 1.6 EcoBoost 4x4](#)  
[Mondeo - Mondeo 2.0i](#)  
[Mondeo - Mondeo 2.3i](#)  
[Mondeo '07 \[BD7\] - Mondeo 2.0](#)  
[Mondeo '07 \[BD7\] - Mondeo 2.5](#)  
[Mondeo '07 \[BD7\] - Mondeo 2.0 TDCi](#)  
[Mondeo '07 \[BD7\] - Mondeo 2.3](#)  
[Mondeo '07 \[BD7\] - Mondeo 2.2 TDCi](#)  
[Mondeo '07 \[BD7\] - Mondeo 1.8 TDCi](#)  
[Mondeo '07 \[BD7\] - Mondeo 1.6 Ti-VCT](#)  
[Mondeo '07 \[BD7\] - Mondeo 2.0 Flexifuel](#)  
[Mondeo '07 \[BD7\] - Mondeo 2.0 LPG](#)  
[Mondeo '07 \[BD7\] - Mondeo 2.0 EcoBoost SCTi](#)  
[Mondeo '07 \[BD7\] - Mondeo 1.6 EcoBoost](#)  
[Mondeo '07 \[BD7\] - Mondeo 1.6 TDCi](#)  
[Mondeo '07 \[BD7\] - Mondeo 1.8 TDCi eco](#)  
[Mondeo '07 \[BD7\] - Mondeo 2.0 TDCi eco](#)  
[Mondeo '07 \[BE7\] - Mondeo 1.6 Ti-VCT](#)  
[Mondeo '07 \[BE7\] - Mondeo 2.0](#)  
[Mondeo '07 \[BE7\] - Mondeo 2.5](#)  
[Mondeo '07 \[BE7\] - Mondeo 1.8 TDCi](#)  
[Mondeo '07 \[BE7\] - Mondeo 2.0 TDCi](#)  
[Mondeo '07 \[BE7\] - Mondeo 2.3](#)  
[Mondeo '07 \[BE7\] - Mondeo 2.2 TDCi](#)  
[Mondeo '07 \[BE7\] - Mondeo 2.0 Flexifuel](#)  
[Mondeo '07 \[BE7\] - Mondeo 2.0 LPG](#)  
[Mondeo '07 \[BE7\] - Mondeo 2.0 EcoBoost SCTi](#)  
[Mondeo '07 \[BE7\] - Mondeo 1.6 EcoBoost](#)  
[Mondeo '07 \[BE7\] - Mondeo 1.6 TDCi](#)  
[Mondeo '07 \[BE7\] - Mondeo 1.8 TDCi eco](#)  
[Mondeo '07 \[BE7\] - Mondeo 2.0 TDCi eco](#)  
[Mondeo '07 \[BG7\] Turnier - Mondeo 1.6 Ti-VCT Turnier](#)  
[Mondeo '07 \[BG7\] Turnier - Mondeo 2.0 Turnier](#)  
[Mondeo '07 \[BG7\] Turnier - Mondeo 2.5 Turnier](#)  
[Mondeo '07 \[BG7\] Turnier - Mondeo 1.8 TDCi Turnier](#)  
[Mondeo '07 \[BG7\] Turnier - Mondeo 2.0 TDCi Turnier](#)  
[Mondeo '07 \[BG7\] Turnier - Mondeo 2.3 Turnier](#)  
[Mondeo '07 \[BG7\] Turnier - Mondeo 2.2 TDCi Turnier](#)  
[Mondeo '07 \[BG7\] Turnier - Mondeo 2.0 Flexifuel Turnier](#)  
[Mondeo '07 \[BG7\] Turnier - Mondeo 2.0 LPG Turnier](#)  
[Mondeo '07 \[BG7\] Turnier - Mondeo 2.0 EcoBoost SCTi Turnier](#)  
[Mondeo '07 \[BG7\] Turnier - Mondeo 1.6 EcoBoost Turnier](#)  
[Mondeo '07 \[BG7\] Turnier - Mondeo 1.6 TDCi Turnier](#)  
[Mondeo '07 \[BG7\] Turnier - Mondeo 1.8 TDCi Turnier eco](#)

[Mondeo '07 \[BG7\] Turnier - Mondeo 2.0 TDCi Turnier eco](#)

[S-MAX '06 - S-MAX 2.3i](#)

[S-MAX '06 \[WA6\] - S-MAX 2.0 TDCi](#)

[S-MAX '06 \[WA6\] - S-MAX 2.0](#)

[S-MAX '06 \[WA6\] - S-MAX 2.5](#)

[S-MAX '06 \[WA6\] - S-MAX 1.8 TDCi](#)

[S-MAX '06 \[WA6\] - S-MAX 2.3](#)

[S-MAX '06 \[WA6\] - S-MAX 2.2 TDCi](#)

[S-MAX '06 \[WA6\] - S-MAX 2.0 FlexiFuel](#)

[S-MAX '06 \[WA6\] - S-MAX 2.0 EcoBoost SCTi](#)

[S-MAX '06 \[WA6\] - S-MAX 1.6 EcoBoost](#)

[S-MAX '06 \[WA6\] - S-MAX 1.6 TDCi](#)

[Transit - Transit 2.8D](#)

[Transit '06 - Transit FT 300 2.2 TDCi](#)

[Transit '06 - Transit FT 330 2.3i](#)

[Transit '06 - Transit FT 260 2.2 TDCi](#)

[Transit '06 - Transit FT 330 2.4 TDCi](#)

[Transit '06 - Transit FT 350 3.2 TDCi](#)

[Transit '06 - Transit FT 330 2.3i CNG](#)

[Transit '06 - Transit FT 330 2.4 TDCi 4x4](#)

[Transit '06 - Transit FT 280 2.2 TDCi](#)

[Transit '06 - Transit FT 330 2.2 TDCi](#)

[Transit '06 - Transit FT 350 2.2 TDCi](#)

[Transit '06 - Transit FT 330 2.3i LPG](#)

[Transit '06 - Transit FT 350 2.3i](#)

[Transit '06 - Transit FT 350 2.3i CNG](#)

[Transit '06 - Transit FT 350 2.3i LPG](#)

[Transit '06 - Transit FT 350 2.4 TDCi](#)

[Transit '06 - Transit FT 430 2.4 TDCi](#)

[Transit '06 - Transit FT 300 2.4 TDCi](#)

[Transit '06 - Transit FT 460 2.4 TDCi](#)

[Transit '06 - Transit FT 350 2.4 TDCi 4x4](#)

[Transit '06 - Transit FT 460 3.2 TDCi](#)

[Transit '06 - Transit FT 300 2.3i](#)

[Transit '12 - Transit FT 250 2.2 TDCi](#)

[Transit '12 - Transit FT 260 2.2 TDCi](#)

[Transit '12 - Transit FT 280 2.2 TDCi](#)

[Transit '12 - Transit FT 300 2.2 TDCi](#)

[Transit '12 - Transit FT 330 2.2 TDCi](#)

[Transit '12 - Transit FT 350 2.2 TDCi](#)

[Transit '12 - Transit FT 350 2.2 TDCi HDT](#)

[Transit '12 - Transit FT 370 2.2 TDCi](#)

[Transit '12 - Transit FT 430 2.2 TDCi](#)

[Transit '12 - Transit FT 430 2.2 TDCi HDT](#)

[Transit '12 - Transit FT 460 2.2 TDCi](#)

[Transit '12 - Transit FT 460 2.2 TDCi HDT](#)

[Transit Euroline '06 - Transit Euroline 2.2 TDCi](#)

[Transit Euroline '12 - Transit Euroline 2.2 TDCi](#)



[Transit Nugget '06 - Transit Nugget 2.2 TDCi](#)

[Transit Nugget '12 - Transit Nugget 2.2 TDCi](#)

[Transit Tourneo '06 - Transit Tourneo 2.2 TDCi](#)

[Transit Tourneo '12 - Transit Tourneo 2.2 TDCi](#)

FORD						C-MAX '07 [DM2] - C-MAX 1.6	
Year	Engine	Liters	HP	System	Functions		
2007/03 - 2010/07		1.6	100	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>		

FORD						C-MAX '07 [DM2] - C-MAX 1.8	
Year	Engine	Liters	HP	System	Functions		
2007/03 - 2010/07		1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>		

FORD						C-MAX '07 [DM2] - C-MAX 1.8 FFV	
Year	Engine	Liters	HP	System	Functions		
2007/03 - 2010/07		1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> </ul> </li> </ul>		

					<ul style="list-style-type: none"> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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FORD C-MAX '07 [DM2] - C-MAX 2.0					
Year	Engine	Liters	HP	System	Functions
2007/03 - 2010/07		2.0	145	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD C-MAX '07 [DM2] - C-MAX 1.6 TDCi					
Year	Engine	Liters	HP	System	Functions
2007/03 - 2010/07		1.6	90	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD C-MAX '07 [DM2] - C-MAX 2.0 TDCi					
Year	Engine	Liters	HP	System	Functions
2007/03 - 2010/07		2.0	136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
2008/02 - 2010/07		2.0	110	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD C-MAX '07 [DM2] - C-MAX 2.0 CNG					
Year	Engine	Liters	HP	System	Functions
2007/03 - 2010/07		2.0	126 - 145	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD C-MAX '07 [DM2] - C-MAX 1.8 TDCi					
Year	Engine	Liters	HP	System	Functions
2007/03 - 2010/07	KKDA	1.8	115	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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FORD						C-MAX '07 [DM2] - C-MAX 2.0 LPG					
Year	Engine	Liters	HP	System	Functions						
2007/03 - 2010/07		2.0	141 - 146	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>						

FORD						C-MAX '11 [DXA] - C-MAX 1.6 Ti-VCT					
Year	Engine	Liters	HP	System	Functions						
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>						
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> </ul> </li> </ul>						

					<ul style="list-style-type: none"> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul>
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
2010/08	IQD...	1.6	105	Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

				<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control V6.0</p>	
			<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> </ul>

2011/08 -	XTDA	1.6	85	Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul>
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Sunlight sensor test</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul>
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> </ul>



					<ul style="list-style-type: none"> <li>- Number of actual errors</li> <li>- Current mileage</li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control V6.0</p>	
				<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>

FORD				C-MAX '11 [DXA] - C-MAX 1.6 Ti-VCT FlexiFuel	
Year	Engine	Liters	HP	System	Functions
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

2010/08 -	MUDA	1.6	117 - 120	<p>Anti-block system ESP V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>

				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>

FORD					C-MAX '11 [DXA] - C-MAX 1.6 EcoBoost	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
2010/08	JQD...	1.6	150	Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul>
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>

FORD

C-MAX '11 [DXA] - C-MAX 1.6 TDCi

Year	Engine	Liters	HP	System	Functions
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<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
<p>Anti-block system ESP V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> </ul> </li> </ul>

2010/08 -	T3D...	1.6	95	<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul>
				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> </ul> </li> </ul>

- Yellow warning lamp
- Door locking, indication light
- ABS warning light

FORD					C-MAX '11 [DXA] - C-MAX 2.0 TDCi	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>	
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>	
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> </ul> </li> </ul>	



2010/08 -	TYDA	2.0	115		- Right footwell vent temperature
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Instrument cluster	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> </ul> </li> </ul>

				Instrument cluster V6.0	<ul style="list-style-type: none"> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul>
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**FORD C-MAX '11 [DXA] - C-MAX 1.0 EcoBoost**

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				Heating / Air conditioner	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> </ul> </li> </ul>

2012/10 -	M1DA	1.0	125	Automatic A/C V6.0	<ul style="list-style-type: none"> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>
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FORD					Fiesta - Fiesta 1.6	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- temperature sensor for middle air flow</li> <li>- temperature sensor for the lower salon part (feet)</li> <li>- Display brightness</li> <li>- AC switch</li> <li>- Rear window preheating switch</li> <li>- Actual position, air distribution flaps</li> <li>- Actual position Mixed air flap</li> <li>- Requested temperature</li> <li>- Key Auto</li> <li>- Key Defrost</li> <li>- Air distribution button upwards</li> <li>- Air distribution button center</li> <li>- Air distribution button downward</li> <li>- Air conditioner evaporator temperature</li> <li>- Footwell vent temperature</li> <li>- Air circulation flaps key button</li> <li>- Passenger compartment temperature sensor</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Function key illumination level</li> <li>- Off button</li> <li>- Central discharge temperature</li> <li>- Heated windshield button</li> <li>- Temperature selector</li> </ul> </li> </ul>	
				Airbag Airbag V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> </ul> </li> </ul>	

2010/09 -		1.6	120		<ul style="list-style-type: none"> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
		1.6	120	Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Exhausted gases signal lamp</li> <li>- Instrument panel illumination</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Number of authorized keys</li> <li>- Display</li> <li>- ABS warning light</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel level meter</li> <li>- Rotational speed sensor</li> <li>- Tachometer</li> <li>- Fuel gauge reading 25 %</li> <li>- Fuel gauge reading 50 %</li> <li>- Fuel gauge reading 75 %</li> <li>- Fuel gauge reading 100 %</li> <li>- Rev counter 1000 1/min</li> <li>- Rev counter 3000 1/min</li> <li>- Rev counter 5000 1/min</li> <li>- Speedometer 30 km/h</li> <li>- Speedometer 50 km/h</li> <li>- Speedometer 100 km/h</li> <li>- Speedometer 220 km/h</li> </ul> </li> </ul>
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> </ul> </li> </ul>

				Central electronics Central electronics V5.0	<ul style="list-style-type: none"> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul>
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<b>FORD</b>	<b>Fiesta '08 [JD, JH] - Fiesta 1.25i</b>
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Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- temperature sensor for middle air flow</li> <li>- temperature sensor for the lower salon part (feet)</li> <li>- Display brightness</li> <li>- AC switch</li> <li>- Rear window preheating switch</li> <li>- Actual position, air distribution flaps</li> <li>- Actual position Mixed air flap</li> <li>- Requested temperature</li> <li>- Key Auto</li> <li>- Key Defrost</li> <li>- Air distribution button upwards</li> <li>- Air distribution button center</li> <li>- Air distribution button downward</li> <li>- Air conditioner evaporator temperature</li> <li>- Footwell vent temperature</li> <li>- Air circulation flaps key button</li> <li>- Passenger compartment temperature sensor</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Function key illumination level</li> <li>- Off button</li> <li>- Central discharge temperature</li> <li>- Heated windshield button</li> <li>- Temperature selector</li> </ul> </li> </ul>
				Airbag Airbag V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>

<p>2008/07 - 2012/11</p>	<p>STJ...</p>	<p>1.2</p>	<p>60</p>	<p>Instrument cluster Instrument cluster V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Exhausted gases signal lamp</li> <li>- Instrument panel illumination</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Number of authorized keys</li> <li>- Display</li> <li>- ABS warning light</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel level meter</li> <li>- Rotational speed sensor</li> <li>- Tachometer</li> <li>- Fuel gauge reading 25 %</li> <li>- Fuel gauge reading 50 %</li> <li>- Fuel gauge reading 75 %</li> <li>- Fuel gauge reading 100 %</li> <li>- Rev counter 1000 1/min</li> <li>- Rev counter 3000 1/min</li> <li>- Rev counter 5000 1/min</li> <li>- Speedometer 30 km/h</li> <li>- Speedometer 50 km/h</li> <li>- Speedometer 100 km/h</li> <li>- Speedometer 220 km/h</li> </ul> </li> </ul>
				<p>Anti-block system ESP V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				<p>Anti-block system ABS V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>

				<p>Central electronics Central electronics V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul> </li> </ul>
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FORD					Fiesta '08 [JD, JH] - Fiesta 1.4i	
Year	Engine	Liters	HP	System	Functions	
				<p>Heating / Air conditioner Automatic A/C V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- temperature sensor for middle air flow</li> <li>- temperature sensor for the lower salon part (feet)</li> <li>- Display brightness</li> <li>- AC switch</li> <li>- Rear window preheating switch</li> <li>- Actual position, air distribution flaps</li> <li>- Actual position Mixed air flap</li> <li>- Requested temperature</li> <li>- Key Auto</li> <li>- Key Defrost</li> <li>- Air distribution button upwards</li> <li>- Air distribution button center</li> <li>- Air distribution button downward</li> <li>- Air conditioner evaporator temperature</li> <li>- Footwell vent temperature</li> <li>- Air circulation flaps key button</li> <li>- Passenger compartment temperature sensor</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Function key illumination level</li> <li>- Off button</li> <li>- Central discharge temperature</li> <li>- Heated windshield button</li> <li>- Temperature selector</li> </ul> </li> </ul>	
				<p>Airbag Airbag V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> </ul> </li> </ul>	



2008/07 - 2012/11	SPJ...	1.4	96 - 97		<ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
				Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Exhausted gases signal lamp</li> <li>- Instrument panel illumination</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Number of authorized keys</li> <li>- Display</li> <li>- ABS warning light</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel level meter</li> <li>- Rotational speed sensor</li> <li>- Tachometer</li> <li>- Fuel gauge reading 25 %</li> <li>- Fuel gauge reading 50 %</li> <li>- Fuel gauge reading 75 %</li> <li>- Fuel gauge reading 100 %</li> <li>- Rev counter 1000 1/min</li> <li>- Rev counter 3000 1/min</li> <li>- Rev counter 5000 1/min</li> <li>- Speedometer 30 km/h</li> <li>- Speedometer 50 km/h</li> <li>- Speedometer 100 km/h</li> <li>- Speedometer 220 km/h</li> </ul> </li> </ul>
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>

			Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul>
			Central electronics Central electronics V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul> </li> </ul>

FORD					Fiesta '08 [JD, JH] - Fiesta 1.6 Ti-VCT	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- temperature sensor for middle air flow</li> <li>- temperature sensor for the lower salon part (feet)</li> <li>- Display brightness</li> <li>- AC switch</li> <li>- Rear window preheating switch</li> <li>- Actual position, air distribution flaps</li> <li>- Actual position Mixed air flap</li> <li>- Requested temperature</li> <li>- Key Auto</li> <li>- Key Defrost</li> <li>- Air distribution button upwards</li> <li>- Air distribution button center</li> <li>- Air distribution button downward</li> <li>- Air conditioner evaporator temperature</li> <li>- Footwell vent temperature</li> <li>- Air circulation flaps key button</li> <li>- Passenger compartment temperature sensor</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Function key illumination level</li> <li>- Off button</li> <li>- Central discharge temperature</li> <li>- Heated windshield button</li> <li>- Temperature selector</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>	

2008/07 - 2012/11	HXJ...	1.6	120	Airbag Airbag V5.0	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Exhausted gases signal lamp</li> <li>- Instrument panel illumination</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Number of authorized keys</li> <li>- Display</li> <li>- ABS warning light</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel level meter</li> <li>- Rotational speed sensor</li> <li>- Tachometer</li> <li>- Fuel gauge reading 25 %</li> <li>- Fuel gauge reading 50 %</li> <li>- Fuel gauge reading 75 %</li> <li>- Fuel gauge reading 100 %</li> <li>- Rev counter 1000 1/min</li> <li>- Rev counter 3000 1/min</li> <li>- Rev counter 5000 1/min</li> <li>- Speedometer 30 km/h</li> <li>- Speedometer 50 km/h</li> <li>- Speedometer 100 km/h</li> <li>- Speedometer 220 km/h</li> </ul> </li> </ul>
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Pressure sensor</li> </ul>
			<p>Anti-block system ABS V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>
			<p>Central electronics Central electronics V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- temperature sensor for middle air flow</li> <li>- temperature sensor for the lower salon part (feet)</li> <li>- Display brightness</li> <li>- AC switch</li> <li>- Rear window preheating switch</li> <li>- Actual position, air distribution flaps</li> <li>- Actual position Mixed air flap</li> <li>- Requested temperature</li> <li>- Key Auto</li> <li>- Key Defrost</li> <li>- Air distribution button upwards</li> <li>- Air distribution button center</li> <li>- Air distribution button downward</li> <li>- Air conditioner evaporator temperature</li> <li>- Footwell vent temperature</li> <li>- Air circulation flaps key button</li> <li>- Passenger compartment temperature sensor</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Function key illumination level</li> <li>- Off button</li> <li>- Central discharge temperature</li> <li>- Heated windshield button</li> <li>- Temperature selector</li> </ul> </li> </ul>

2008/07 - 2009/08	RVJA	1.6	120	Airbag Airbag V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Exhausted gases signal lamp</li> <li>- Instrument panel illumination</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Number of authorized keys</li> <li>- Display</li> <li>- ABS warning light</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel level meter</li> <li>- Rotational speed sensor</li> <li>- Tachometer</li> <li>- Fuel gauge reading 25 %</li> <li>- Fuel gauge reading 50 %</li> <li>- Fuel gauge reading 75 %</li> <li>- Fuel gauge reading 100 %</li> <li>- Rev counter 1000 1/min</li> <li>- Rev counter 3000 1/min</li> <li>- Rev counter 5000 1/min</li> <li>- Speedometer 30 km/h</li> <li>- Speedometer 50 km/h</li> <li>- Speedometer 100 km/h</li> <li>- Speedometer 220 km/h</li> </ul> </li> </ul>
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul>
				<p>Central electronics Central electronics V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul> </li> </ul>

FORD					
Fiesta '08 [JD, JH] - Fiesta 1.4 TDCi					
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- temperature sensor for middle air flow</li> <li>- temperature sensor for the lower salon part (feet)</li> <li>- Display brightness</li> <li>- AC switch</li> <li>- Rear window preheating switch</li> <li>- Actual position, air distribution flaps</li> <li>- Actual position Mixed air flap</li> <li>- Requested temperature</li> <li>- Key Auto</li> <li>- Key Defrost</li> <li>- Air distribution button upwards</li> <li>- Air distribution button center</li> <li>- Air distribution button downward</li> <li>- Air conditioner evaporator temperature</li> <li>- Footwell vent temperature</li> <li>- Air circulation flaps key button</li> <li>- Passenger compartment temperature sensor</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Function key illumination level</li> <li>- Off button</li> <li>- Central discharge temperature</li> <li>- Heated windshield button</li> <li>- Temperature selector</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>

2008/07 - 2012/11	F6J...	1.4	68	<p>Airbag Airbag V5.0</p>	<ul style="list-style-type: none"> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
				<p>Instrument cluster Instrument cluster V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Exhausted gases signal lamp</li> <li>- Instrument panel illumination</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Number of authorized keys</li> <li>- Display</li> <li>- ABS warning light</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel level meter</li> <li>- Rotational speed sensor</li> <li>- Tachometer</li> <li>- Fuel gauge reading 25 %</li> <li>- Fuel gauge reading 50 %</li> <li>- Fuel gauge reading 75 %</li> <li>- Fuel gauge reading 100 %</li> <li>- Rev counter 1000 1/min</li> <li>- Rev counter 3000 1/min</li> <li>- Rev counter 5000 1/min</li> <li>- Speedometer 30 km/h</li> <li>- Speedometer 50 km/h</li> <li>- Speedometer 100 km/h</li> <li>- Speedometer 220 km/h</li> </ul> </li> </ul>
				<p>Anti-block system ESP V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

			Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>
			Central electronics Central electronics V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul> </li> </ul>
			Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- temperature sensor for middle air flow</li> <li>- temperature sensor for the lower salon part (feet)</li> <li>- Display brightness</li> <li>- AC switch</li> <li>- Rear window preheating switch</li> <li>- Actual position, air distribution flaps</li> <li>- Actual position Mixed air flap</li> <li>- Requested temperature</li> <li>- Key Auto</li> <li>- Key Defrost</li> <li>- Air distribution button upwards</li> <li>- Air distribution button center</li> <li>- Air distribution button downward</li> <li>- Air conditioner evaporator temperature</li> <li>- Footwell vent temperature</li> <li>- Air circulation flaps key button</li> <li>- Passenger compartment temperature sensor</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Function key illumination level</li> <li>- Off button</li> <li>- Central discharge temperature</li> <li>- Heated windshield button</li> <li>- Temperature selector</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>



2010/09 - 2012/11	KVJA	1.4	69	Airbag Airbag V5.0	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
				Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Battery voltage</li> <li>- Exhausted gases signal lamp</li> <li>- Instrument panel illumination</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Number of authorized keys</li> <li>- Display</li> <li>- ABS warning light</li> <li>- Parking brake, control light</li> <li>• <b>Actuators</b></li> <li>- Fuel level meter</li> <li>- Rotational speed sensor</li> <li>- Tachometer</li> <li>- Fuel gauge reading 25 %</li> <li>- Fuel gauge reading 50 %</li> <li>- Fuel gauge reading 75 %</li> <li>- Fuel gauge reading 100 %</li> <li>- Rev counter 1000 1/min</li> <li>- Rev counter 3000 1/min</li> <li>- Rev counter 5000 1/min</li> <li>- Speedometer 30 km/h</li> <li>- Speedometer 50 km/h</li> <li>- Speedometer 100 km/h</li> <li>- Speedometer 220 km/h</li> </ul>
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul>

				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul> </li> </ul>	

FORD				Fiesta '08 [JD, JH] - Fiesta 1.6 TDCi	
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- temperature sensor for middle air flow</li> <li>- temperature sensor for the lower salon part (feet)</li> <li>- Display brightness</li> <li>- AC switch</li> <li>- Rear window preheating switch</li> <li>- Actual position, air distribution flaps</li> <li>- Actual position Mixed air flap</li> <li>- Requested temperature</li> <li>- Key Auto</li> <li>- Key Defrost</li> <li>- Air distribution button upwards</li> <li>- Air distribution button center</li> <li>- Air distribution button downward</li> <li>- Air conditioner evaporator temperature</li> <li>- Footwell vent temperature</li> <li>- Air circulation flaps key button</li> <li>- Passenger compartment temperature sensor</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Function key illumination level</li> <li>- Off button</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Central discharge temperature</li> <li>- Heated windshield button</li> <li>- Temperature selector</li> </ul>
				Airbag Airbag V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
2008/07 - 2012/11	HHJ...	1.6	90	Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Exhausted gases signal lamp</li> <li>- Instrument panel illumination</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Number of authorized keys</li> <li>- Display</li> <li>- ABS warning light</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel level meter</li> <li>- Rotational speed sensor</li> <li>- Tachometer</li> <li>- Fuel gauge reading 25 %</li> <li>- Fuel gauge reading 50 %</li> <li>- Fuel gauge reading 75 %</li> <li>- Fuel gauge reading 100 %</li> <li>- Rev counter 1000 1/min</li> <li>- Rev counter 3000 1/min</li> <li>- Rev counter 5000 1/min</li> <li>- Speedometer 30 km/h</li> <li>- Speedometer 50 km/h</li> <li>- Speedometer 100 km/h</li> <li>- Speedometer 220 km/h</li> </ul> </li> </ul>
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul>
			Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>
			Central electronics Central electronics V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul> </li> </ul>
			Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- temperature sensor for middle air flow</li> <li>- temperature sensor for the lower salon part (feet)</li> <li>- Display brightness</li> <li>- AC switch</li> <li>- Rear window preheating switch</li> <li>- Actual position, air distribution flaps</li> <li>- Actual position Mixed air flap</li> <li>- Requested temperature</li> <li>- Key Auto</li> <li>- Key Defrost</li> <li>- Air distribution button upwards</li> <li>- Air distribution button center</li> <li>- Air distribution button downward</li> <li>- Air conditioner evaporator temperature</li> <li>- Footwell vent temperature</li> <li>- Air circulation flaps key button</li> <li>- Passenger compartment temperature sensor</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Function key illumination level</li> <li>- Off button</li> <li>- Central discharge temperature</li> <li>- Heated windshield button</li> <li>- Temperature selector</li> </ul>
				Airbag Airbag V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
2009/01 - 2012/11	HHJF	1.6	75	Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Exhausted gases signal lamp</li> <li>- Instrument panel illumination</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Number of authorized keys</li> <li>- Display</li> <li>- ABS warning light</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel level meter</li> <li>- Rotational speed sensor</li> <li>- Tachometer</li> <li>- Fuel gauge reading 25 %</li> <li>- Fuel gauge reading 50 %</li> <li>- Fuel gauge reading 75 %</li> <li>- Fuel gauge reading 100 %</li> <li>- Rev counter 1000 1/min</li> <li>- Rev counter 3000 1/min</li> <li>- Rev counter 5000 1/min</li> <li>- Speedometer 30 km/h</li> <li>- Speedometer 50 km/h</li> <li>- Speedometer 100 km/h</li> <li>- Speedometer 220 km/h</li> </ul> </li> </ul>
				Anti-block system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

			ESP V5.0	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul>
			Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>
			Central electronics Central electronics V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul> </li> </ul>
			Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- temperature sensor for middle air flow</li> <li>- temperature sensor for the lower salon part (feet)</li> <li>- Display brightness</li> <li>- AC switch</li> <li>- Rear window preheating switch</li> <li>- Actual position, air distribution flaps</li> <li>- Actual position Mixed air flap</li> <li>- Requested temperature</li> <li>- Key Auto</li> <li>- Key Defrost</li> <li>- Air distribution button upwards</li> <li>- Air distribution button center</li> <li>- Air distribution button downward</li> <li>- Air conditioner evaporator temperature</li> <li>- Footwell vent temperature</li> <li>- Air circulation flaps key button</li> <li>- Passenger compartment temperature sensor</li> </ul> </li> </ul>

2010/03 - 2012/11	TZJ...	1.6	95		<ul style="list-style-type: none"> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Function key illumination level</li> <li>- Off button</li> <li>- Central discharge temperature</li> <li>- Heated windshield button</li> <li>- Temperature selector</li> </ul>
				Airbag Airbag V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>
				Central electronics Central electronics V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul>
2010/04 - 2012/11	UBJA	1.6	75	Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- temperature sensor for middle air flow</li> <li>- temperature sensor for the lower salon part (feet)</li> <li>- Display brightness</li> <li>- AC switch</li> <li>- Rear window preheating switch</li> <li>- Actual position, air distribution flaps</li> <li>- Actual position Mixed air flap</li> <li>- Requested temperature</li> <li>- Key Auto</li> <li>- Key Defrost</li> <li>- Air distribution button upwards</li> <li>- Air distribution button center</li> <li>- Air distribution button downward</li> <li>- Air conditioner evaporator temperature</li> <li>- Footwell vent temperature</li> <li>- Air circulation flaps key button</li> <li>- Passenger compartment temperature sensor</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Function key illumination level</li> <li>- Off button</li> <li>- Central discharge temperature</li> <li>- Heated windshield button</li> <li>- Temperature selector</li> </ul> </li> </ul>
				Airbag Airbag V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> </ul> </li> </ul>



				<ul style="list-style-type: none"> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul>
			<p>Central electronics Central electronics V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- temperature sensor for middle air flow</li> <li>- temperature sensor for the lower salon part (feet)</li> <li>- Display brightness</li> <li>- AC switch</li> <li>- Rear window preheating switch</li> <li>- Actual position, air distribution flaps</li> <li>- Actual position Mixed air flap</li> <li>- Requested temperature</li> <li>- Key Auto</li> <li>- Key Defrost</li> <li>- Air distribution button upwards</li> <li>- Air distribution button center</li> <li>- Air distribution button downward</li> <li>- Air conditioner evaporator temperature</li> <li>- Footwell vent temperature</li> <li>- Air circulation flaps key button</li> <li>- Passenger compartment temperature sensor</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Function key illumination level</li> <li>- Off button</li> <li>- Central discharge temperature</li> <li>- Heated windshield button</li> <li>- Temperature selector</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> </ul> </li> </ul>

2012/02 - 2012/11	T3JA	1.6	95	Airbag Airbag V5.0	<ul style="list-style-type: none"> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
				Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Exhausted gases signal lamp</li> <li>- Instrument panel illumination</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Number of authorized keys</li> <li>- Display</li> <li>- ABS warning light</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel level meter</li> <li>- Rotational speed sensor</li> <li>- Tachometer</li> <li>- Fuel gauge reading 25 %</li> <li>- Fuel gauge reading 50 %</li> <li>- Fuel gauge reading 75 %</li> <li>- Fuel gauge reading 100 %</li> <li>- Rev counter 1000 1/min</li> <li>- Rev counter 3000 1/min</li> <li>- Rev counter 5000 1/min</li> <li>- Speedometer 30 km/h</li> <li>- Speedometer 50 km/h</li> <li>- Speedometer 100 km/h</li> <li>- Speedometer 220 km/h</li> </ul> </li> </ul>
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

				<p>Central electronics Central electronics V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul>
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**FORD** **Fiesta '08 [JD, JH] - Fiesta 1.4 LPG**

Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- temperature sensor for middle air flow</li> <li>- temperature sensor for the lower salon part (feet)</li> <li>- Display brightness</li> <li>- AC switch</li> <li>- Rear window preheating switch</li> <li>- Actual position, air distribution flaps</li> <li>- Actual position Mixed air flap</li> <li>- Requested temperature</li> <li>- Key Auto</li> <li>- Key Defrost</li> <li>- Air distribution button upwards</li> <li>- Air distribution button center</li> <li>- Air distribution button downward</li> <li>- Air conditioner evaporator temperature</li> <li>- Footwell vent temperature</li> <li>- Air circulation flaps key button</li> <li>- Passenger compartment temperature sensor</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Function key illumination level</li> <li>- Off button</li> <li>- Central discharge temperature</li> <li>- Heated windshield button</li> <li>- Temperature selector</li> </ul>
				<p>Airbag Airbag V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> </ul>

2009/05 - 2012/11	RTJ...	1.4	92 - 97		<ul style="list-style-type: none"> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
				Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Exhausted gases signal lamp</li> <li>- Instrument panel illumination</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Number of authorized keys</li> <li>- Display</li> <li>- ABS warning light</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel level meter</li> <li>- Rotational speed sensor</li> <li>- Tachometer</li> <li>- Fuel gauge reading 25 %</li> <li>- Fuel gauge reading 50 %</li> <li>- Fuel gauge reading 75 %</li> <li>- Fuel gauge reading 100 %</li> <li>- Rev counter 1000 1/min</li> <li>- Rev counter 3000 1/min</li> <li>- Rev counter 5000 1/min</li> <li>- Speedometer 30 km/h</li> <li>- Speedometer 50 km/h</li> <li>- Speedometer 100 km/h</li> <li>- Speedometer 220 km/h</li> </ul> </li> </ul>
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> </ul> </li> </ul>				

					<ul style="list-style-type: none"> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul>
				Central electronics Central electronics V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul> </li> </ul>

FORD					
Fiesta '08 [JD, JH] - Fiesta 1.6 Ti-VCT Sport S					
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- temperature sensor for middle air flow</li> <li>- temperature sensor for the lower salon part (feet)</li> <li>- Display brightness</li> <li>- AC switch</li> <li>- Rear window preheating switch</li> <li>- Actual position, air distribution flaps</li> <li>- Actual position Mixed air flap</li> <li>- Requested temperature</li> <li>- Key Auto</li> <li>- Key Defrost</li> <li>- Air distribution button upwards</li> <li>- Air distribution button center</li> <li>- Air distribution button downward</li> <li>- Air conditioner evaporator temperature</li> <li>- Footwell vent temperature</li> <li>- Air circulation flaps key button</li> <li>- Passenger compartment temperature sensor</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Function key illumination level</li> <li>- Off button</li> <li>- Central discharge temperature</li> <li>- Heated windshield button</li> <li>- Temperature selector</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>

2011/01 - 2012/11	U5JA	1.6	134	Airbag Airbag V5.0	<ul style="list-style-type: none"> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
				Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Exhausted gases signal lamp</li> <li>- Instrument panel illumination</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Number of authorized keys</li> <li>- Display</li> <li>- ABS warning light</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel level meter</li> <li>- Rotational speed sensor</li> <li>- Tachometer</li> <li>- Fuel gauge reading 25 %</li> <li>- Fuel gauge reading 50 %</li> <li>- Fuel gauge reading 75 %</li> <li>- Fuel gauge reading 100 %</li> <li>- Rev counter 1000 1/min</li> <li>- Rev counter 3000 1/min</li> <li>- Rev counter 5000 1/min</li> <li>- Speedometer 30 km/h</li> <li>- Speedometer 50 km/h</li> <li>- Speedometer 100 km/h</li> <li>- Speedometer 220 km/h</li> </ul> </li> </ul>
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

				<p>Central electronics Central electronics V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul> </li> </ul>
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**FORD** **Fiesta '13 [JA8, JR8] - Fiesta 1.4 LPG**

Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- temperature sensor for middle air flow</li> <li>- temperature sensor for the lower salon part (feet)</li> <li>- Display brightness</li> <li>- AC switch</li> <li>- Rear window preheating switch</li> <li>- Actual position, air distribution flaps</li> <li>- Actual position Mixed air flap</li> <li>- Requested temperature</li> <li>- Key Auto</li> <li>- Key Defrost</li> <li>- Air distribution button upwards</li> <li>- Air distribution button center</li> <li>- Air distribution button downward</li> <li>- Air conditioner evaporator temperature</li> <li>- Footwell vent temperature</li> <li>- Air circulation flaps key button</li> <li>- Passenger compartment temperature sensor</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Function key illumination level</li> <li>- Off button</li> <li>- Central discharge temperature</li> <li>- Heated windshield button</li> <li>- Temperature selector</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Exhausted gases signal lamp</li> <li>- Instrument panel illumination</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> </ul> </li> </ul>

2012/11 -	RTJB	1.4	92 - 97	Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Number of authorized keys</li> <li>- Display</li> <li>- ABS warning light</li> <li>- Parking brake, control light</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel level meter</li> <li>- Rotational speed sensor</li> <li>- Tachometer</li> <li>- Fuel gauge reading 25 %</li> <li>- Fuel gauge reading 50 %</li> <li>- Fuel gauge reading 75 %</li> <li>- Fuel gauge reading 100 %</li> <li>- Rev counter 1000 1/min</li> <li>- Rev counter 3000 1/min</li> <li>- Rev counter 5000 1/min</li> <li>- Speedometer 30 km/h</li> <li>- Speedometer 50 km/h</li> <li>- Speedometer 100 km/h</li> <li>- Speedometer 220 km/h</li> </ul> </li> </ul>
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>
				Central electronics	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> </ul> </li> </ul>



				Central electronics V5.0	<ul style="list-style-type: none"> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul>
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**FORD** **Fiesta '13 [JA8, JR8] - Fiesta 1.4**

Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- temperature sensor for middle air flow</li> <li>- temperature sensor for the lower salon part (feet)</li> <li>- Display brightness</li> <li>- AC switch</li> <li>- Rear window preheating switch</li> <li>- Actual position, air distribution flaps</li> <li>- Actual position Mixed air flap</li> <li>- Requested temperature</li> <li>- Key Auto</li> <li>- Key Defrost</li> <li>- Air distribution button upwards</li> <li>- Air distribution button center</li> <li>- Air distribution button downward</li> <li>- Air conditioner evaporator temperature</li> <li>- Footwell vent temperature</li> <li>- Air circulation flaps key button</li> <li>- Passenger compartment temperature sensor</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Function key illumination level</li> <li>- Off button</li> <li>- Central discharge temperature</li> <li>- Heated windshield button</li> <li>- Temperature selector</li> </ul> </li> </ul>
2012/11 -	SPJC	1.4	97	Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Exhausted gases signal lamp</li> <li>- Instrument panel illumination</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Number of authorized keys</li> <li>- Display</li> <li>- ABS warning light</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Parking brake, control light</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel level meter</li> <li>- Rotational speed sensor</li> <li>- Tachometer</li> <li>- Fuel gauge reading 25 %</li> <li>- Fuel gauge reading 50 %</li> <li>- Fuel gauge reading 75 %</li> <li>- Fuel gauge reading 100 %</li> <li>- Rev counter 1000 1/min</li> <li>- Rev counter 3000 1/min</li> <li>- Rev counter 5000 1/min</li> <li>- Speedometer 30 km/h</li> <li>- Speedometer 50 km/h</li> <li>- Speedometer 100 km/h</li> <li>- Speedometer 220 km/h</li> </ul> </li> </ul>
				Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>
				Central electronics Central electronics V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul> </li> </ul>

FORD					Fiesta [B252-299] - Fiesta 1.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- temperature sensor for middle air flow</li> <li>- temperature sensor for the lower salon part (feet)</li> <li>- Display brightness</li> <li>- AC switch</li> </ul> </li> </ul>	

				<p>Heating / Air conditioner Automatic A/C V5.0</p>	<ul style="list-style-type: none"> <li>- Rear window preheating switch</li> <li>- Actual position, air distribution flaps</li> <li>- Actual position Mixed air flap</li> <li>- Requested temperature</li> <li>- Key Auto</li> <li>- Key Defrost</li> <li>- Air distribution button upwards</li> <li>- Air distribution button center</li> <li>- Air distribution button downward</li> <li>- Air conditioner evaporator temperature</li> <li>- Footwell vent temperature</li> <li>- Air circulation flaps key button</li> <li>- Passenger compartment temperature sensor</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Function key illumination level</li> <li>- Off button</li> <li>- Central discharge temperature</li> <li>- Heated windshield button</li> <li>- Temperature selector</li> </ul>
<p>2010/09 -</p>	<p>SPJA</p>	<p>1.4</p>	<p>95</p>	<p>Instrument cluster Instrument cluster V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Exhausted gases signal lamp</li> <li>- Instrument panel illumination</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Number of authorized keys</li> <li>- Display</li> <li>- ABS warning light</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel level meter</li> <li>- Rotational speed sensor</li> <li>- Tachometer</li> <li>- Fuel gauge reading 25 %</li> <li>- Fuel gauge reading 50 %</li> <li>- Fuel gauge reading 75 %</li> <li>- Fuel gauge reading 100 %</li> <li>- Rev counter 1000 1/min</li> <li>- Rev counter 3000 1/min</li> <li>- Rev counter 5000 1/min</li> <li>- Speedometer 30 km/h</li> <li>- Speedometer 50 km/h</li> <li>- Speedometer 100 km/h</li> <li>- Speedometer 220 km/h</li> </ul> </li> </ul>
				<p>Anti-block system ESP V5.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul>
				Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>
				Central electronics Central electronics V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul> </li> </ul>

FORD					Focus '04 - Focus 1.8i	
Year	Engine	Liters	HP	System	Functions	
2005/10 -		1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>	

FORD Focus '04 [DA3] - Focus 1.6i					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	HWD...	1.6	100	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2007/03 - 2008/01	SHDA	1.6	100	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Focus '04 [DA3] - Focus 1.6 Ti-VCT					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	HXD...	1.6	115	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	AOD...	2.0	145	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Focus '04 [DA3] - Focus 1.6 TDCi					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	G8D...	1.6	109	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Focus '04 [DA3] - Focus 2.0 TDCi					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	G6D...	2.0	133 - 136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> </ul> </li> </ul>

- Alert sensor, rear

FORD Focus '04 [DA3] - Focus 1.8 TDCi					
Year	Engine	Liters	HP	System	Functions
2005/04 - 2008/01	KKD...	1.8	115	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Focus '04 [DA3] - Focus 2.5i ST					
Year	Engine	Liters	HP	System	Functions
2005/10 - 2008/01	HYDA	2.5	226	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Focus '04 [DA3] - Focus 1.8 FFV					
Year	Engine	Liters	HP	System	Functions
2005/05 - 2008/01	Q7DA	1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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FORD Focus '04 [DA3] - Focus 1.8i					
Year	Engine	Liters	HP	System	Functions
2005/05 - 2008/01	QQDB	1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Focus '04 [DA3] Turnier - Focus 1.6 TDCi Turnier					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	G8D...	1.6	109	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Focus '04 [DA3] Turnier - Focus 1.6 Ti-VCT Turnier					
Year	Engine	Liters	HP	System	Functions
2004/07				Parking assisting system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> </ul> </li> </ul>



- 2008/01	HXD...	1.6	115	Park Distance Control M5.0	<ul style="list-style-type: none"> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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FORD Focus '04 [DA3] Turnier - Focus 1.6i Turnier					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	HWD...	1.6	100	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2007/03 - 2008/01	SHDA	1.6	100	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Focus '04 [DA3] Turnier - Focus 2.0 TDCi Turnier					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	G6D...	2.0	133 - 136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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FORD Focus '04 [DA3] Turnier - Focus 2.0i Turnier					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	AOD...	2.0	145	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Focus '04 [DA3] Turnier - Focus 1.8 TDCi Turnier					
Year	Engine	Liters	HP	System	Functions
2005/04 - 2008/01	KKD...	1.8	115	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Focus '04 [DA3] Turnier - Focus 1.8 FFV Turnier					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> </ul> </li> </ul>

2005/05 - 2008/01	Q7DA	1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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FORD Focus '04 [DA3] Turnier - Focus 1.8i Turnier					
Year	Engine	Liters	HP	System	Functions
2005/05 - 2008/01	QQDB	1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Focus '04 [DB3] - Focus 1.6 Ti-VCT					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	HXD...	1.6	116	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Focus '04 [DB3] - Focus 1.6i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> </ul>

2004/07 - 2008/01	HWD...	1.6	100	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2007/03 - 2008/01	SHDA	1.6	100	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD						Focus '04 [DB3] - Focus 2.0 TDCi					
Year	Engine	Liters	HP	System	Functions						
2004/07 - 2008/01	G6D...	2.0	133 - 136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>						

FORD						Focus '04 [DB3] - Focus 2.0i					
Year	Engine	Liters	HP	System	Functions						
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>						

2004/07 - 2008/01	AOD...	2.0	145	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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FORD					
Focus '04 [DB3] - Focus 1.8 TDCi					
Year	Engine	Liters	HP	System	Functions
2005/04 - 2008/01	KKD...	1.8	115	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>

FORD					
Focus '04 [DB3] - Focus 1.8 FFV					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	Q7DA	1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>

FORD					
Focus '04 [DB3] - Focus 1.8i					
Year	Engine	Liters	HP	System	Functions

Year	Engine	Liters	HP	System	Functions
2005/05 - 2008/01	QQDB	1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Focus '08 [FF] Turnier - Focus 1.6 Ti-VCT Turnier					
Year	Engine	Liters	HP	System	Functions
2007/12 - 2011/12	SIDA	1.6	115 - 120	Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>

FORD Focus '11 [DYA, DYB] - Focus 1.6 Ti-VCT					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
2011/01 -	IQD...	1.6	105	Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul>
			Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
			Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
			Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> </ul> </li> </ul>



				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
				<p>Anti-block system ESP V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> </ul> </li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> </ul> </li> </ul>
2011/08 -	XTDA	1.6	86		

				<ul style="list-style-type: none"> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul>
			Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
			Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
			Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

				<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
			<p>Airbag Airbag G9.0</p>	
			<p>Anti-block system ESP V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> </ul> </li> </ul>
2012/02	XTDA	1.6	86	

			<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul>
			<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
			<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

2011/01 -	JQD...	1.6	150	<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>
				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul>
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FORD					
Focus '11 [DYA, DYB] - Focus 1.6 TDCi					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
2011/01 -	T3D...	1.6	95	<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>
				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> </ul> </li> </ul>



				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul>
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FORD					
Focus '11 [DYA, DYB] - Focus 2.0 TDCi					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> </ul>

2011/01 -	TYDA	2.0	115	<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> <li>- Sunlight sensor test</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>
				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>

<b>FORD</b>	<b>Focus '11 [DYA, DYB] - Focus 1.6 Ti-VCT FlexiFuel</b>
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Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> </ul> </li> </ul>

2011/01 -	MUDA	1.6	117 - 120		<ul style="list-style-type: none"> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul>
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> </ul> </li> </ul>

				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>

FORD					
Focus '11 [DYA, DYB] - Focus 2.0 GDI Ti-VCT					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> </ul>

2011/09 -	XQDA	2.0	150	Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul>
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>

FORD					
Focus '11 [DYA, DYB] - Focus 1.0 EcoBoost					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

2012/02 -	M2DA	1.0	101	<p>Anti-block system ESP V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> </ul> </li> </ul>



					- Heated windshield button signal
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>

FORD					Focus '11 [DYA, DYB] - Focus 1.6 TDCi ECOnetic	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
2012/06 -	NGD...	1.6	105	Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul>
			Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
			Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
			Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>

FORD				Focus '11 [DYA, DYB] - Focus 2.0 EcoBoost ST	
Year	Engine	Liters	HP	System	Functions

<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
<p>Anti-block system ESP V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> </ul> </li> </ul>

2012/06 -	R9DA	2.0	250	<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul>
				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> </ul> </li> </ul>

- Yellow warning lamp
- Door locking, indication light
- ABS warning light

FORD Focus '11 [DYA, DYB] Turnier - Focus 1.6 EcoBoost Turnier					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> </ul> </li> </ul>

2011/01 -	JQD...	1.6	150		- Right footwell vent temperature
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Instrument cluster	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> </ul> </li> </ul>

				Instrument cluster V6.0	<ul style="list-style-type: none"> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul>
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**FORD Focus '11 [DYA, DYB] Turnier - Focus 1.6 TDCi Turnier**

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> </ul> </li> </ul>



2011/01 -	T1D...	1.6	115	Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>
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FORD					
Focus '11 [DYA, DYB] Turnier - Focus 1.6 Ti-VCT Turnier					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>

				<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
2011/01	IQD...	1.6	105	<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>
				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
			Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>
			Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
			Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> </ul> </li> </ul>

2012/02 -	XTDA	1.6	86		<ul style="list-style-type: none"> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul>
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> </ul> </li> </ul>

				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>

FORD					
Focus '11 [DYA, DYB] Turnier - Focus 2.0 TDCi Turnier					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Anti-block system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

2011/01 -	TXDB	2.0	163	ESP V6.0	<ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul>
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Current mileage</li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control V6.0</p>	
			<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>

FORD Focus '11 [DYA, DYB] Turnier - Focus 1.6 Ti-VCT FlexiFuel Turnier					
Year	Engine	Liters	HP	System	Functions
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> </ul>



2011/01 -	MUDA	1.6	117 - 120	<p>Anti-block system ESP V6.0</p> <p>Heating / Air conditioner Automatic A/C V6.0</p> <p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>
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				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>

FORD					
Focus '11 [DYA, DYB] Turnier - Focus 1.0 EcoBoost Turnier					
Year	Engine	Liters	HP	System	Functions
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
2012/02 -	M1DA	1.0	125	Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul>
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul> </li> </ul>

FORD					Focus '11 [DYA, DYB] Turnier - Focus 1.6 TDCi EConetic Turnier	
Year	Engine	Liters	HP	System	Functions	
					• Identification	

<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
<p>Anti-block system ESP V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> </ul> </li> </ul>

-	NGD...	1.6	105	<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul>
				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> </ul> </li> </ul>

- Door locking, indication light
- ABS warning light

FORD Focus '11 [DYA, DYB] Turnier - Focus 2.0 EcoBoost ST Turnier					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Adjustments / settings               <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Functional tests               <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>

2012/06 -	R9DA	2.0	250	<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>
				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul>
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**FORD Focus '11 [DYA, DYB] Turnier - Focus 2.0 GDI Ti-VCT Turnier**

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				Heating / Air conditioner	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> </ul> </li> </ul>

2011/09 -	XQDA	2.0	150	Automatic A/C V6.0	<ul style="list-style-type: none"> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- Engine revolution</li> <li>- Steering wheel rotation angle</li> <li>- Number of actual errors</li> <li>- Current mileage</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Driving speed adjustment lamp</li> <li>- Exhausted gases signal lamp</li> <li>- Preliminary preheating control lamp</li> <li>- Fuel reserve, control light</li> <li>- Oil pressure signal lamp</li> <li>- Generator lamp</li> <li>- Seat belt control light</li> <li>- Brakes control light</li> <li>- ASR/ESP control light</li> <li>- Hi-beam lights, control light</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Right direction indicator control light</li> <li>- Left direction indicator control light</li> <li>- Red warning lamp</li> <li>- Yellow warning lamp</li> <li>- Door locking, indication light</li> <li>- ABS warning light</li> </ul>
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FORD					
Focus C-MAX '04 [DM2] - Focus C-MAX 1.6					
Year	Engine	Liters	HP	System	Functions
2003/09 - 2007/03	HWD...	1.6	100	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>

FORD					
Focus C-MAX '04 [DM2] - Focus C-MAX 1.8					
Year	Engine	Liters	HP	System	Functions
2003/06 - 2004/05	CSDA	1.8	120	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>

2004/04 - 2007/03	QQD...	1.8	122 - 125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
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FORD Focus C-MAX '04 [DM2] - Focus C-MAX 1.6 TDCi					
Year	Engine	Liters	HP	System	Functions
2003/06 - 2007/03	G8D...	1.6	109	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2004/11 - 2007/03	HHD...	1.6	90	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Focus C-MAX '04 [DM2] - Focus C-MAX 2.0 TDCi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• Identification</li> </ul>

2003/06 - 2007/03	G6D...	2.0	133 - 136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
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**FORD** **Focus C-MAX '04 [DM2] - Focus C-MAX 2.0**

Year	Engine	Liters	HP	System	Functions
2004/04 - 2007/03	AOD...	2.0	145	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

**FORD** **Focus C-MAX '04 [DM2] - Focus C-MAX 1.6 Ti-VCT**

Year	Engine	Liters	HP	System	Functions
2004/07 - 2007/03	HXDA	1.6	116	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Focus C-MAX '04 [DM2] - Focus C-MAX 1.8 TDCi					
Year	Engine	Liters	HP	System	Functions
2005/04 - 2007/03	KKDA	1.8	115	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Focus C-MAX '04 [DM2] - Focus C-MAX 1.8 FFV					
Year	Engine	Liters	HP	System	Functions
2005/05 - 2007/03	Q7DA	1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Focus C-MAX '04 [DM2] - Focus C-MAX 2.0 CNG					
Year	Engine	Liters	HP	System	Functions
2005/11 - 2007/03	SYDA	2.0	126 - 145	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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FORD Focus [Fase II] - Focus 1.6i 16V Flex					
Year	Engine	Liters	HP	System	Functions
2010/01 -		1.6	109 - 116	Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>

FORD Focus [Fase II] - Focus Sedan 1.6i 16V Flex					
Year	Engine	Liters	HP	System	Functions
2010/01 -		1.6	109 - 116	Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>

FORD Fusion - Fusion 1.6 Diesel Turbo 8V					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> </ul> </li> </ul>

2007/07 -	F6JA-B	1.6	101	Central electronics Central electronics V5.0	<ul style="list-style-type: none"> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul>
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FORD Fusion - Fusion 1.4 Diesel 8V					
Year	Engine	Liters	HP	System	Functions
2007/07 - 2009/12	F6JA-B	1.4	68	Central electronics Central electronics V5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Collision signal</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Driver's door contact switch</li> <li>- Number of authorized remote controls</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul> </li> </ul>

FORD Galaxy '06 [WA6] - Galaxy 2.0					
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> </ul> </li> </ul>



2006/03	AOW...	2.0	146	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
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**FORD** Galaxy '06 [WA6] - Galaxy 1.8 TDCi

Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> </ul> </li> </ul>
2006/03	FFWA	1.8	100		

2010/03					<ul style="list-style-type: none"> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					Galaxy '06 [WA6] - Galaxy 2.0 TDCi	
Year	Engine	Liters	HP	System	Functions	
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> </ul> </li> </ul>	

2006/03 - 2010/02	AZWA	2.0	131	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
			<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> </ul> </li> </ul>

2006/03 -	QXW...	2.0	140		<ul style="list-style-type: none"> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> </ul> </li> </ul>

2007/11 - 2012/12	KLWA	2.0	116	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> </ul> </li> </ul>
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			Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
			Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> </ul> </li> </ul>



2010/03 -	TXWA	2.0	163	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> </ul> </li> </ul>

2008/09 - 2012/12	AZWC	2.0	136	Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> </ul> </li> </ul>

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					Galaxy '06 [WA6] - Galaxy 2.3	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> </ul> </li> </ul>	

2007/09 -	SEWA	2.3	160	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul>
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<b>FORD</b>	<b>Galaxy '06 [WA6] - Galaxy 2.2 TDCi</b>
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Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
2008/03 - 2010/10	Q4WA	2.2	175	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> </ul> </li> </ul>

2010/11 -	KNW...	2.2	200	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul>
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**FORD** Galaxy '06 [WA6] - Galaxy 2.0 FlexiFuel

Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> </ul>



-	TBW...	2.0	146		<ul style="list-style-type: none"> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					Galaxy '06 [WA6] - Galaxy 2.0 EcoBoost SCTi	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> </ul> </li> </ul>	

2010/03 -	TNW...	2.0	200 - 203	<ul style="list-style-type: none"> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
			<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
			<p>Parking assisting system</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> </ul> </li> </ul>

				Park Distance Control G9.0	<ul style="list-style-type: none"> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD				Galaxy '06 [WA6] - Galaxy 1.6 EcoBoost	
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> </ul> </li> </ul>

2010/11 -	JTW...	1.6	160	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
2011/02 -	T1W...	1.6	115	Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> </ul> </li> </ul>

					- Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					
Kuga '08 [DM2] - Kuga 2.0 TDCi					
Year	Engine	Liters	HP	System	Functions
2008/02 - 2012/11	G6DG	2.0	136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> </ul> </li> </ul>

2010/05 - 2012/11	UKDA	2.0	136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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**FORD** **Kuga '08 [DM2] - Kuga 2.0 TDCi 4x4**

Year	Engine	Liters	HP	System	Functions
2008/02 - 2012/11	G6DG	2.0	136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2010/04 - 2012/11	TXDA	2.0	163 - 167	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2010/05 - 2012/11	UKDA	2.0	136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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FORD					
Kuga '08 [DM2] - Kuga 2.5i 4x4					
Year	Engine	Liters	HP	System	Functions
2008/12 - 2012/11	HYD...	2.5	200	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD					
Kuga '13 [DM2] - Kuga 2.0 TDCi					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> </ul> </li> </ul>



2012/11 -	UKMA	2.0	136		<ul style="list-style-type: none"> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul>
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>

FORD					Kuga '13 [DM2] - Kuga 2.0 TDCi 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> </ul> </li> </ul>	

2012/11 -	UKMA	2.0	136	Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> </ul> </li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> </ul> </li> </ul>				

					<ul style="list-style-type: none"> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul>
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**FORD** **Kuga '13 [DM2] - Kuga 1.6 EcoBoost**

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
2012/11 -	JQM...	1.6	150		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> </ul> </li> </ul>

			Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
			Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>

FORD					
Kuga '13 [DM2] - Kuga 1.6 EcoBoost 4x4					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> </ul> </li> </ul>

2012/11 -	JTMA	1.6	182	Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>- Adaptation, steering wheel angle sensor</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Sunlight sensor test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Fresh air fan control</li> <li>- Current position fresh air / ventilation flap</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- air conditioner</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Kilometer reading</li> <li>- Clutch pedal switch</li> <li>- Signal horn</li> <li>- Main beam relay</li> <li>- Hatchback status</li> <li>- Windscreen wiper relay</li> <li>- Emergency lights switch</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Passenger side rear door status</li> <li>- Driver side front door status</li> <li>- Passenger side front door status</li> <li>- Driver side rear door status</li> <li>- Windshield washer relay</li> <li>- Number of authorized remote controls</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> </ul> </li> </ul>

FORD					Mondeo - Mondeo 2.0i	
Year	Engine	Liters	HP	System	Functions	
					• <b>Identification</b>	

				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> </ul> </li> </ul>
2007/11	CAF488Q2	2.0	146		

					<ul style="list-style-type: none"> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					Mondeo - Mondeo 2.3i	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
2007/11	L3	2.3	160	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					
Mondeo '07 [BD7] - Mondeo 2.0					
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> </ul> </li> </ul>

				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
2007/02	AOB...	2.0	146	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> </ul> </li> </ul>

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					
Mondeo '07 [BD7] - Mondeo 2.5					
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>

<p>2007/02 - 2010/03</p>	<p>HU...</p>	<p>2.5</p>	<p>220</p>	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

<b>FORD</b>	<b>Mondeo '07 [BD7] - Mondeo 2.0 TDCi</b>
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Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> </ul> </li> </ul>

2007/02 - 2010/02	AZBA	2.0	131		<ul style="list-style-type: none"> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
				<p>Heating / Air conditioner</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> </ul> </li> </ul>

				Automatic A/C G9.0	<ul style="list-style-type: none"> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
2007/02	QXB...	2.0	140	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> </ul> </li> </ul>



				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
<p>2007/11 -</p>	<p>KLBA</p>	<p>2.0</p>	<p>116</p>	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> </ul> </li> </ul>

			Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
			Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
			Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> </ul> </li> </ul>

2010/03 -	TXBA	2.0	163	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
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**FORD** **Mondeo '07 [BD7] - Mondeo 2.3**

Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> </ul> </li> </ul>

2007/09 -	SEBA	2.3	160	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> </ul> </li> </ul>

- Supplem./auxiliary heater fuel pump

FORD					Mondeo '07 [BD7] - Mondeo 2.2 TDCi	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>	
2008/03 -	Q4BA	2.2	175	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> </ul> </li> </ul>	

2010/11				<ul style="list-style-type: none"> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistance, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
2010/11	KNB...	2.2	200	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					Mondeo '07 [BD7] - Mondeo 1.8 TDCi	
Year	Engine	Liters	HP	System	Functions	
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>	

2007/02 - 2010/11	QYBA	1.8	125	Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul>

FORD					Mondeo '07 [BD7] - Mondeo 1.6 Ti-VCT	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> </ul>	

2007/02 - 2010/08	PNBA	1.6	125	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> </ul> </li> </ul>

2010/09 -	KGBA	1.6	120	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> </ul> </li> </ul>

- Additional cooling fluid pump
- Glow plug
- Auxiliary/stationery heater status
- Combustion air blower
- Main ON time
- Supplem./auxiliary heater fuel pump

**FORD** **Mondeo '07 [BD7] - Mondeo 2.0 Flexifuel**

Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> </ul> </li> </ul>

2008/02 -	TBB...	2.0	146	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD

Mondeo '07 [BD7] - Mondeo 2.0 LPG

Year	Engine	Liters	HP	System	Functions
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2009/04 -	TBB...	2.0	141 - 146	<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					Mondeo '07 [BD7] - Mondeo 2.0 EcoBoost SCTi	
Year	Engine	Liters	HP	System	Functions	
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
2010/03 -	TNB...	2.0	199 - 203	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
2010/09	TPBA	2.0	240	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> </ul> </li> </ul>

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD				Mondeo '07 [BD7] - Mondeo 1.6 EcoBoost	
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

2010/11 -	JTB...	1.6	160	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
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**FORD** **Mondeo '07 [BD7] - Mondeo 1.6 TDCi**

Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> </ul> </li> </ul>



2011/02 -	T1B...	1.6	115	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					
Mondeo '07 [BD7] - Mondeo 1.8 TDCi eco					
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> </ul> </li> </ul>

2007/02 - 2010/11	KHBA	1.8	125	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					Mondeo '07 [BD7] - Mondeo 2.0 TDCi eco	
Year	Engine	Liters	HP	System	Functions	
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>	
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> </ul> </li> </ul>	

2008/09 -	LPBA	2.0	116	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
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<b>FORD</b>	<b>Mondeo '07 [BE7] - Mondeo 1.6 Ti-VCT</b>
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Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> </ul> </li> </ul>

2007/02 - 2010/08	RHBA	1.6	110	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul>
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
2010/09	KGBA	1.6	120	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					Mondeo '07 [BE7] - Mondeo 2.0	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> </ul> </li> </ul>	



				Automatic A/C G9.0	<ul style="list-style-type: none"> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
2007/02	AOB...	2.0	146	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD				Mondeo '07 [BE7] - Mondeo 2.5	
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

2007/02 - 2010/03	HU...	2.5	220	Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					Mondeo '07 [BE7] - Mondeo 1.8 TDCi	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> </ul> </li> </ul>	

2007/02 - 2010/11	FFBA	1.8	100	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
			Additional heater Auxiliary/supplementary heater G9.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					Mondeo '07 [BE7] - Mondeo 2.0 TDCi	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> </ul> </li> </ul>	

2007/02 - 2010/02	AZBA	2.0	131	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
2007/02	QXB...	2.0	140	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> </ul> </li> </ul>



				<ul style="list-style-type: none"> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
<p>2007/11 -</p>	<p>KLBA</p>	<p>2.0</p>	<p>116</p>	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

2010/03	TXBA	2.0	163	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> </ul>

				<ul style="list-style-type: none"> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> </ul> </li> </ul>

2008/09	AZBC	2.0	136	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> </ul> </li> </ul>

FORD					Mondeo '07 [BE7] - Mondeo 2.3	
Year	Engine	Liters	HP	System	Functions	
2007/09 -	SEBA	2.3	160	Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>	
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					Mondeo '07 [BE7] - Mondeo 2.2 TDCi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>	



2008/03 - 2010/11	Q4BA	2.2	175	Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
2010/11 -	KNB...	2.2	200	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul>

FORD					Mondeo '07 [BE7] - Mondeo 2.0 Flexifuel	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> </ul>	

2008/02 -	TBB...	2.0	146	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Resistance kneebag front driver's side</li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					
Mondeo '07 [BE7] - Mondeo 2.0 LPG					
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> </ul> </li> </ul>

2009/04 -	TBB...	2.0	141 - 146	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
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**FORD** **Mondeo '07 [BE7] - Mondeo 2.0 EcoBoost SCTi**

Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> </ul> </li> </ul>



2010/03 -	TNB...	2.0	199 - 203	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> </ul> </li> </ul>

					- Supplem./auxiliary heater fuel pump
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
2010/09 -	TPBA	2.0	240	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					Mondeo '07 [BE7] - Mondeo 1.6 EcoBoost	
Year	Engine	Liters	HP	System	Functions	
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
2010/11 -	JTB...	1.6	160	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					Mondeo '07 [BE7] - Mondeo 1.6 TDCi	
Year	Engine	Liters	HP	System	Functions	
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>	

				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
2011/02	T1B...	1.6	115	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul>

FORD					
Mondeo '07 [BE7] - Mondeo 1.8 TDCi eco					
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> </ul>

2007/02 - 2010/11	KHBA	1.8	125	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul>
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<b>FORD</b>	<b>Mondeo '07 [BE7] - Mondeo 2.0 TDCi eco</b>
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Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul> </li> </ul>
2008/09 -	LPBA	2.0	116		

					<ul style="list-style-type: none"> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					Mondeo '07 [BG7] Turnier - Mondeo 1.6 Ti-VCT Turnier	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>	

				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
<p>2007/02 - 2010/08</p>	<p>RHBA</p>	<p>1.6</p>	<p>110</p>	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>

			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>

2010/09	KGBA	1.6	120	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

<b>FORD</b>	<b>Mondeo '07 [BG7] Turnier - Mondeo 2.0 Turnier</b>
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Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> </ul> </li> </ul>

2007/02	AOB...	2.0	146	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul>
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**FORD** **Mondeo '07 [BG7] Turnier - Mondeo 2.5 Turnier**

Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> </ul> </li> </ul>



2007/02 - 2010/03	HU...	2.5	220	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
2007/02 - 2010/11	FFBA	1.8	101	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					Mondeo '07 [BG7] Turnier - Mondeo 2.0 TDCi Turnier	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> </ul> </li> </ul>	

				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
<p>2007/02 - 2010/02</p>	<p>AZBA</p>	<p>2.0</p>	<p>131</p>	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> </ul> </li> </ul>

			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> </ul> </li> </ul>

2007/02	QXB...	2.0	140	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> </ul> </li> </ul>

2007/11 -	KLBA	2.0	116	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>



				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
2010/03	TXBA	2.0	163	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
<p>2008/09 -</p>	<p>AZBC</p>	<p>2.0</p>	<p>136</p>	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					
Mondeo '07 [BG7] Turnier - Mondeo 2.3 Turnier					
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> </ul> </li> </ul>

				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
<p>2007/09 -</p>	<p>SEBA</p>	<p>2.3</p>	<p>160</p>		<p>Central electronics Central electronics G9.0</p>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					
Mondeo '07 [BG7] Turnier - Mondeo 2.2 TDCi Turnier					
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> </ul> </li> </ul>

2008/03 - 2010/11	Q4BA	2.2	175	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> </ul> </li> </ul>



2010/11 -	KNB...	2.2	200	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
2008/02 -	TBB...	2.0	146	Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					Mondeo '07 [BG7] Turnier - Mondeo 2.0 LPG Turnier	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> </ul> </li> </ul>	

2009/04 -	TBB...	2.0	141 - 146	Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					
Mondeo '07 [BG7] Turnier - Mondeo 2.0 EcoBoost SCTi Turnier					
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

2010/03 -	TNB...	2.0	199 - 203	Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>

			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>

2010/09 -	TPBA	2.0	240	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

<b>FORD</b>	<b>Mondeo '07 [BG7] Turnier - Mondeo 1.6 EcoBoost Turnier</b>
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Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> </ul> </li> </ul>

2010/11 -	JTB...	1.6	160	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> </ul> </li> </ul>

				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul>
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FORD					
Mondeo '07 [BG7] Turnier - Mondeo 1.6 TDCi Turnier					
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> </ul> </li> </ul>

2011/02 -	T1B...	1.6	115	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
2007/02 - 2010/11	KHBA	1.8	125	Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					
Mondeo '07 [BG7] Turnier - Mondeo 2.0 TDCi Turnier eco					
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> </ul> </li> </ul>

				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
2008/09	LPBA	2.0	116	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> </ul> </li> </ul>

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					S-MAX '06 - S-MAX 2.3i	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>	



2007/03 -	Duratec- HE/L3	2.3	160	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

<b>FORD</b>	<b>S-MAX '06 [WA6] - S-MAX 2.0 TDCi</b>
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Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> </ul> </li> </ul>

2006/03 - 2010/02	AZWA	2.0	131		<ul style="list-style-type: none"> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
2006/03	QXW...	2.0	140	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
			<p>Airbag</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> </ul> </li> </ul>

2007/09 - 2012/12	KLWA	2.0	116	Airbag G9.0	<ul style="list-style-type: none"> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> </ul> </li> </ul>

			Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
			Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
			Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> </ul> </li> </ul>

2010/03 -	TXWA	2.0	163	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>



			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> </ul> </li> </ul>

2008/09 - 2012/12	AZWC	2.0	136	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD

S-MAX '06 [WA6] - S-MAX 2.0

Year	Engine	Liters	HP	System	Functions
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				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
2006/03	AOW...	2.0	146	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					S-MAX '06 [WA6] - S-MAX 2.5	
Year	Engine	Liters	HP	System	Functions	
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> </ul> </li> </ul>	

2006/03 - 2010/03	HUWA	2.5	220	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> </ul> </li> </ul>
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				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					S-MAX '06 [WA6] - S-MAX 1.8 TDCi	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> </ul> </li> </ul>	

2006/03 - 2010/03	QYWA	1.8	125	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

2007/01 - 2010/03	FFWA	1.8	101	<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>



				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					S-MAX '06 [WA6] - S-MAX 2.3	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
2007/09 -	SEWA	2.3	160	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					
S-MAX '06 [WA6] - S-MAX 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> </ul> </li> </ul>

2008/03 - 2010/10	Q4WA	2.2	175	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
2010/11	KNW...	2.2	200	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					S-MAX '06 [WA6] - S-MAX 2.0 FlexiFuel	
Year	Engine	Liters	HP	System	Functions	
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
2008/03 -	TBW...	2.0	146	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					
S-MAX '06 [WA6] - S-MAX 2.0 EcoBoost SCTi					
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> </ul> </li> </ul>



				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul>
<p>2010/03 -</p>	<p>TNW...</p>	<p>2.0</p>	<p>200 - 203</p>	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> </ul> </li> </ul>

			Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
			Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
			Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
			Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> </ul> </li> </ul>

2010/09 -	TPWA	2.0	240	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>
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<b>FORD</b>	<b>S-MAX '06 [WA6] - S-MAX 1.6 EcoBoost</b>
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Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> </ul> </li> </ul>

2010/11 -	JTW...	1.6	160	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul>
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<b>FORD</b>	<b>S-MAX '06 [WA6] - S-MAX 1.6 TDCi</b>
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Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Actual position, air distribution flaps</li> <li>- Current position air mix flap left</li> <li>- Current position air mix flap right</li> <li>- Air conditioner evaporator temperature</li> <li>- Current position fresh air / ventilation flap</li> <li>- Center left vent temperature</li> <li>- Center right vent temperature</li> <li>- Left footwell vent temperature</li> <li>- Right footwell vent temperature</li> </ul> </li> </ul>
				Airbag Airbag G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Resistance Front airbag driver side</li> <li>- Resistance Front airbag front passenger side</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance kneebag front driver's side</li> </ul> </li> </ul>
				Central electronics	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Parking brake</li> <li>- Battery voltage</li> <li>- brake fluid level</li> <li>- Collision signal</li> <li>- Instrument panel illumination</li> <li>- Top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Indicators switch</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Rear fog light relay</li> </ul> </li> </ul>

2011/02 -	T1W...	1.6	115	Central electronics G9.0	<ul style="list-style-type: none"> <li>- Windscreen heating relay</li> <li>- Rear window defroster relay</li> <li>- Windscreen washer system switch</li> <li>- Rear window heater, control light</li> <li>- Fog light switch</li> <li>- Wiper switch</li> <li>- Rear fog lights switch</li> <li>- Backup lights</li> <li>- Electrical parking brake</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Heated rear window button signal</li> <li>- Heated windshield button signal</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- Cruise control, button SET</li> <li>- Cruise control button SET-</li> <li>- Cruise control button ON</li> <li>- Cruise control button OFF</li> <li>- Cruise control button RES</li> <li>- Cruise control button TIME-</li> <li>- Cruise control, button TIME +</li> <li>- Cruise control button CAN</li> <li>- Indicator/hazard warning lights relay</li> <li>- Heated windshield indicator lamp</li> </ul>
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- Additional cooling fluid pump</li> <li>- Glow plug</li> <li>- Auxiliary/stationery heater status</li> <li>- Combustion air blower</li> <li>- Main ON time</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

FORD					Transit - Transit 2.8D	
Year	Engine	Liters	HP	System	Functions	

2006/08 -	JX493ZLQ	2.8	116	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
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FORD					Transit '06 - Transit FT 300 2.2 TDCi	
Year	Engine	Liters	HP	System	Functions	
2006/04 - 2011/09	P8F...	2.2	85	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>	
2006/04 - 2010/06	QVFA	2.2	110	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>	



2007/10 - 2011/09	PGF...	2.2	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2008/10 - 2011/09	SRF...	2.2	115	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2006/04 - 2007/08	QWF...	2.2	131	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

**FORD**

**Transit '06 - Transit FT 330 2.3i**

Year	Engine	Liters	HP	System	Functions
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2006/04 - 2011/09	GZF...	2.3	145	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
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FORD					Transit '06 - Transit FT 260 2.2 TDCi	
Year	Engine	Liters	HP	System	Functions	
2006/04 - 2007/08	QWF...	2.2	130 - 131	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>	
2008/10 - 2011/09	SRF...	2.2	115	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>	

2006/04 - 2011/09	P8F...	2.2	85	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2006/04 - 2010/06	QVFA	2.2	110	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2007/10 - 2011/09	PGF...	2.2	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

**FORD**

**Transit '06 - Transit FT 330 2.4 TDCi**

Year	Engine	Liters	HP	System	Functions
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2006/07 - 2011/09	PHF...	2.4	100 - 101	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
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FORD						Transit '06 - Transit FT 350 3.2 TDCi					
Year	Engine	Liters	HP	System		Functions					
2007/08 - 2011/09	SAF...	3.2	200	Parking assisting system Park Distance Control G9.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>					

FORD						Transit '06 - Transit FT 330 2.3i CNG					
Year	Engine	Liters	HP	System		Functions					
2006/04 - 2011/09	GZFC	2.3	136 - 146	Parking assisting system Park Distance Control G9.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> </ul> </li> </ul>					

					<ul style="list-style-type: none"> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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FORD					
Transit '06 - Transit FT 330 2.4 TDCi 4x4					
Year	Engine	Liters	HP	System	Functions
2007/09 - 2011/09	H9F...	2.4	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD					
Transit '06 - Transit FT 280 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2008/10 - 2011/09	SRF...	2.2	115	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2006/04 - 2011/09	P8F...	2.2	85	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
2006/04 - 2007/08	QWF...	2.2	130 - 131	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2006/04 - 2010/06	QVFA	2.2	110	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2007/10 - 2011/09	PGF...	2.2	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> </ul> </li> </ul>

- Parking assistance, switch
- Parking assistant, control light
- Alert sensor, front
- Alert sensor, rear

FORD						Transit '06 - Transit FT 330 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions						
2008/10 - 2011/09	SRF...	2.2	115	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>						
2006/04 - 2007/08	QWF...	2.2	131	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>						
2006/04 - 2010/06	QVFA	2.2	110	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> </ul> </li> </ul>						

					<ul style="list-style-type: none"> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
2007/10 - 2011/09	PGF...	2.2	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD					
Transit '06 - Transit FT 350 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2008/10 - 2011/09	SRF...	2.2	115	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2006/04 - 2007/08	QWF...	2.2	131	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
2006/04 - 2010/06	QVFA	2.2	110	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2007/10 - 2011/09	PGF...	2.2	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD					
Transit '06 - Transit FT 330 2.3i LPG					
Year	Engine	Liters	HP	System	Functions
2006/04 - 2011/09	GZFC	2.3	146	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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FORD Transit '06 - Transit FT 350 2.3i					
Year	Engine	Liters	HP	System	Functions
2006/04 - 2011/09	GZF...	2.3	145	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Transit '06 - Transit FT 350 2.3i CNG					
Year	Engine	Liters	HP	System	Functions
2006/04 - 2011/09	GZFC	2.3	136 - 146	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Transit '06 - Transit FT 350 2.3i LPG					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> </ul> </li> </ul>

2006/04 - 2011/09	GZFC	2.3	146	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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FORD					
Transit '06 - Transit FT 350 2.4 TDCi					
Year	Engine	Liters	HP	System	Functions
2006/07 - 2011/09	PHF...	2.4	100 - 101	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD					
Transit '06 - Transit FT 430 2.4 TDCi					
Year	Engine	Liters	HP	System	Functions
2006/07 - 2011/09	PHF...	2.4	100 - 101	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Transit '06 - Transit FT 300 2.4 TDCi					
Year	Engine	Liters	HP	System	Functions
2006/07 - 2011/09	PHF...	2.4	100 - 101	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Transit '06 - Transit FT 460 2.4 TDCi					
Year	Engine	Liters	HP	System	Functions
2006/07 - 2011/09	H9F...	2.4	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Transit '06 - Transit FT 350 2.4 TDCi 4x4					
Year	Engine	Liters	HP	System	Functions
2007/09 - 2011/09	H9F...	2.4	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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FORD Transit '06 - Transit FT 460 3.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2007/08 - 2011/09	SAF...	3.2	200	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Transit '06 - Transit FT 300 2.3i					
Year	Engine	Liters	HP	System	Functions
2006/04 - 2011/09	GZF...	2.3	146	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Transit '12 - Transit FT 250 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> </ul>

2011/09 -	DRF...	2.2	100	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
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FORD					
Transit '12 - Transit FT 260 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	DRF...	2.2	100	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD					
Transit '12 - Transit FT 280 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	CYF...	2.2	125	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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FORD Transit '12 - Transit FT 300 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	DRF...	2.2	100	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Transit '12 - Transit FT 330 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	DRF...	2.2	100	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Transit '12 - Transit FT 350 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> </ul> </li> </ul>

2011/09 -	CYF...	2.2	125	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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FORD					
Transit '12 - Transit FT 350 2.2 TDCi HDT					
Year	Engine	Liters	HP	System	Functions
2011/09 -	USR...	2.2	135	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD					
Transit '12 - Transit FT 370 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	DRR...	2.2	100	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD					
Transit '12 - Transit FT 430 2.2 TDCi					



Year	Engine	Liters	HP	System	Functions
2011/09 -	CVR...	2.2	155	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD					
Transit '12 - Transit FT 430 2.2 TDCi HDT					
Year	Engine	Liters	HP	System	Functions
2011/09 -	USR...	2.2	135	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD					
Transit '12 - Transit FT 460 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	CVR...	2.2	155	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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FORD						Transit '12 - Transit FT 460 2.2 TDCi HDT					
Year	Engine	Liters	HP	System		Functions					
2011/09 -	USR...	2.2	135	Parking assisting system Park Distance Control G9.0		<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>					

FORD						Transit Euroline '06 - Transit Euroline 2.2 TDCi					
Year	Engine	Liters	HP	System		Functions					
2006/04 - 2010/06	QVFA	2.2	110	Parking assisting system Park Distance Control G9.0		<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>					
2006/04			130			<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> </ul> </li> </ul>					

- 2007/08	QWF...	2.2	- 131	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
2007/10 - 2011/09	PGF...	2.2	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2008/10 - 2011/09	SRF...	2.2	115	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD						Transit Euroline '12 - Transit Euroline 2.2 TDCi					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> </ul> </li> </ul>					

2011/09 -	CYFB	2.2	125	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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**FORD** **Transit Nugget '06 - Transit Nugget 2.2 TDCi**

Year	Engine	Liters	HP	System	Functions
2006/04 - 2010/06	QVFA	2.2	110	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2006/04 - 2007/08	QWF...	2.2	130 - 131	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> </ul> </li> </ul>

2007/10 - 2011/09	PGF...	2.2	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
2008/10 - 2011/09	SRF...	2.2	115	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Transit Nugget '12 - Transit Nugget 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	CYFB	2.2	125	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

FORD Transit Tourneo '06 - Transit Tourneo 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

2006/04 - 2010/06	QVFA	2.2	110	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
2006/04 - 2007/08	QWF...	2.2	130 - 131	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2007/10 - 2011/09	PGF...	2.2	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>
2008/10					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> </ul> </li> </ul>

- 2011/09	SRF...	2.2	115	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul>
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FORD					
Transit Tourneo '12 - Transit Tourneo 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	CYF...	2.2	125	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Parking assistance, switch</li> <li>- Parking assistant, control light</li> <li>- Alert sensor, front</li> <li>- Alert sensor, rear</li> </ul> </li> </ul>

[Accent \[RB\] - Accent 1.6 GDi](#)  
[Accent blue \[RB\] - Accent blue 1.6 CRDi](#)  
[Accent blue \[RB\] - Accent blue 1.4](#)  
[Avante HD - Avante HD 2.0i](#)  
[Avante HD - Avante HD 1.6 VGT CRDi](#)  
[Avante XD - Avante XD 2.0i CVVT](#)  
[Coupe \[GK\] - Coupe 2.0i](#)  
[Elantra Station Wagon - Elantra 2.0 Station Wagon](#)  
[Elantra \[HD\] - Elantra 2.0](#)  
[Elantra \[HD\] - Elantra 1.6 CRDi](#)  
[Elantra \[XD\] - Elantra 2.0 CRDi](#)  
[Elantra \[XD\] Hatchback - Elantra 2.0 16V Hatchback](#)  
[Elantra \[XD\] Hatchback - Elantra 2.0 CRDi Hatchback](#)  
[Genesis - Genesis 3.8i](#)  
[Genesis - Genesis 3.3i](#)  
[Genesis - Genesis 4.6i](#)  
[Genesis \[BH\] - Genesis 3.8](#)  
[Genesis \[BK\] Coupe - Genesis 3.8 Coupe](#)  
[Genesis \[BK\] Coupe - Genesis 2.0 T Coupe](#)  
[Genesis \[BK\] Coupe - Genesis Coupe 2.0i](#)  
[Grandeur HG - Grandeur HG 2.4 GDi](#)  
[Grandeur HG - Grandeur HG 3.0 GDi](#)  
[Grandeur TG - Grandeur TG 2.4i](#)  
[Santa Fe New - Santa Fe New 2.2 VGT CRDi](#)  
[Santa Fe \[CM\] - Santa Fe 2.2 CRDi 4x4](#)  
[Santa Fe \[CM\] - Santa Fe 2.2 CRDi](#)  
[Santa Fe \[CM\] - Santa Fe 2.7i 4x4](#)  
[Santa Fe \[CM\] - Santa Fe 2.7i](#)  
[Santa Fe \[CM\] - Santa Fe 2.4i](#)  
[Santa Fe \[CM\] - Santa Fe 2.4i 4x4](#)  
[Santa Fe \[CM\] - Santa Fe 2.0 CRDi](#)  
[Santa Fe \[CM\] - Santa Fe 2.0 CRDi 4x4](#)  
[Santa Fe \[CM\] - Santa Fe 3.5i 24V](#)  
[Santa Fe \[CM\] - Santa Fe 3.5i 24V 4x4](#)  
[Solaris \[RB\] - Solaris 1.4](#)  
[Solaris \[RB\] - Solaris 1.6](#)  
[Solaris \[RB\] Hatchback - Solaris 1.4 Hatchback](#)  
[Solaris \[RB\] Hatchback - Solaris 1.6 Hatchback](#)  
[Sonata \[NF\] - Sonata 2.0 CRDi](#)  
[Sonata \[NF\] - Sonata 2.0 VGT CRDi](#)  
[Sonata \[NF\] - Sonata 2.0 LPI](#)  
[Sonata \[NF\] - Sonata 2.4i](#)  
[Sonata \[NF\] - Sonata 2.0i](#)  
[Sonata \[YF\] - Sonata 2.0](#)  
[Sonata \[YF\] - Sonata 2.4 GDI](#)  
[Sonata \[YF\] - Sonata 2.0 LPI](#)



[Tiburon \[GK, GS\] - Tiburon 2.0](#)  
[Tucson - Tucson 2.0 VGT CRDi](#)  
[Tucson \[JM\] - Tucson 2.0i](#)  
[Tuscani - Tuscani 2.0i](#)  
[Veracruz - Veracruz 3.0 V6 CRDi-VGT](#)  
[Veracruz - Veracruz 3.8](#)  
[Veracruz - Veracruz 3.8 4x4](#)  
[Verna - Verna 1.4i](#)  
[Verna - Verna 1.4D](#)  
[Verna - Verna 1.6D](#)  
[Verna - Verna 1.3i 8V](#)  
[Verna - Verna 1.5i 8V](#)  
[Verna - Verna 1.5i 16V](#)  
[Verna - Verna 1.5 VGT](#)  
[Verna - Verna 1.6i VVT](#)  
[Verna New - Verna New 1.3i](#)  
[Verna New - Verna New 1.5i](#)  
[i30 \[FD, FDH\] - i30 1.4](#)  
[i30 \[FD, FDH\] - i30 1.6](#)  
[i30 \[FD, FDH\] - i30 2.0](#)  
[i30 \[FD, FDH\] - i30 1.6 CRDi](#)  
[i30 \[FD, FDH\] - i30 2.0 CRDi](#)  
[i30 \[FD, FDH\] - i30 1.4 LPG](#)  
[i30 \[FD, FDH\] - i30 1.6 LPG](#)  
[i30 \[FD, FDH\] - i30 2.0 LPG](#)  
[i30 \[FD, FDH\] CW - i30 1.6 CW](#)  
[i30 \[FD, FDH\] CW - i30 2.0 CW](#)  
[i30 \[FD, FDH\] CW - i30 1.6 CRDi CW](#)  
[i30 \[FD, FDH\] CW - i30 2.0 CRDi CW](#)  
[i30 \[FD, FDH\] CW - i30 1.4 CW](#)  
[i30 \[FD, FDH\] CW - i30 1.4 LPG CW](#)  
[i30 \[FD, FDH\] CW - i30 1.6 LPG CW](#)  
[i30 \[FD, FDH\] CW - i30 2.0 LPG CW](#)  
[ix35 \[EL\] - ix35 2.0](#)  
[ix35 \[EL\] - ix35 2.0 4x4](#)  
[ix55 \[EN\] - ix55 3.0 CRDi 4x4](#)

HYUNDAI					Accent [RB] - Accent 1.6 GDi	
Year	Engine	Liters	HP	System	Functions	
2011/01 -	G4FD	1.6	140	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Engine revolution</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Transmission selector levers switch</li> <li>- Pressure control solenoid valve</li> <li>- Torque converter clutch status</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Voltage at main relay</li> <li>- Transmission control fault lamp</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Pressure control solenoid valve A</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> </ul> </li> </ul>	

HYUNDAI					Accent blue [RB] - Accent blue 1.6 CRDi	
Year	Engine	Liters	HP	System	Functions	
2011/01 -	D4FB	1.6	128	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Engine revolution</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Transmission selector levers switch</li> <li>- Pressure control solenoid valve</li> <li>- Torque converter clutch status</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Voltage at main relay</li> <li>- Transmission control fault lamp</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Pressure control solenoid valve A</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> </ul>
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**HYUNDAI Accent blue [RB] - Accent blue 1.4**

Year	Engine	Liters	HP	System	Functions
2011/01 -	G4FA	1.4	109	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Engine revolution</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Transmission selector levers switch</li> <li>- Pressure control solenoid valve</li> <li>- Torque converter clutch status</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Voltage at main relay</li> <li>- Transmission control fault lamp</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Pressure control solenoid valve A</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> </ul> </li> </ul>

**HYUNDAI Avante HD - Avante HD 2.0i**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> </ul> </li> </ul>

2006/04 -	Beta II	2.0	143	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
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HYUNDAI					Avante HD - Avante HD 1.6 VGT CRDI	
Year	Engine	Liters	HP	System	Functions	
2006/06 -		1.6	159	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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HYUNDAI					Avante XD - Avante XD 2.0i CVVT	
Year	Engine	Liters	HP	System	Functions	
2000/04 - 2003/05		2.0	143	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul>	

Year	Engine	Liters	HP	System	Functions
2001/10 - 2009/08	G4GC...	2.0	137 - 143	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>

HYUNDAI Elantra Station Wagon - Elantra 2.0 Station Wagon					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> </ul> </li> </ul>

2008/09 -	G4GF Beta II	2.0	139	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
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HYUNDAI					
Elantra [HD] - Elantra 2.0					
Year	Engine	Liters	HP	System	Functions
2005/09 -	G4GF Beta II	2.0	139	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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**HYUNDAI Elantra [HD] - Elantra 1.6 CRDi**

Year	Engine	Liters	HP	System	Functions
2006/08 - 2011/06	D4FB	1.6	116	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> </ul> </li> </ul>



- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3

HYUNDAI					Elantra [XD] - Elantra 2.0 CRDi	
Year	Engine	Liters	HP	System	Functions	
2001/06 - 2006/08	D4EA	2.0	113	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>	

HYUNDAI					Elantra [XD] Hatchback - Elantra 2.0 16V Hatchback	
Year	Engine	Liters	HP	System	Functions	
2000/06 - 2006/09	G4GC...	2.0	139 - 143	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>	

HYUNDAI					Elantra [XD] Hatchback - Elantra 2.0 CRDi Hatchback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> </ul> </li> </ul>	

2001/06 - 2006/08	D4EA	2.0	113	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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HYUNDAI					Genesis - Genesis 3.8i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- solenoid valve relay</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Transmission</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Gas pedal position sensor (%)</li> <li>- Transmission output speed</li> <li>- Sport switch</li> <li>- Air conditioner switch</li> <li>- Automatic transmission power supply</li> <li>- Engine torque</li> </ul> </li> </ul>	

2008/01 -		3.8	262	Gear box control 6-gears automatic transmission HIVEC 5.4	<ul style="list-style-type: none"> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Selector lever position</li> <li>- Gearshift solenoid 3</li> <li>- Sportronic switch upshift</li> <li>- Sportronic switch downshift</li> <li>- Operating switch speed</li> <li>- Dry-running operation function</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Gearshift solenoid 4</li> <li>- Solenoid shift valve SLT pressure</li> <li>- Solenoid shift valve SLC 1 current</li> <li>- Solenoid shift valve SLC 2 current</li> <li>- Solenoid shift valve SLU current</li> <li>- MIL requested by fault code</li> <li>- Shift lock solenoid valve</li> <li>- Feedback solenoid valve 1</li> <li>- Feedback solenoid valve 2</li> <li>- Feedback solenoid valve 3</li> <li>- Feedback solenoid valve 4</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid valve 1</li> <li>- Solenoid valve 2</li> <li>- Solenoid valve 3</li> <li>- Solenoid valve 4</li> <li>- solenoid valve relay</li> <li>- Throttle linear solenoid, sw. solenoid valve</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLC 1</li> <li>- Solenoid shift valve SLC 2</li> </ul> </li> </ul>
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HYUNDAI				Genesis - Genesis 3.3i	
Year	Engine	Liters	HP	System	Functions
2008/01 -		3.3	290	Gear box control 6-gears automatic transmission HIVEC 5.4	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- solenoid valve relay</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Transmission</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Gas pedal position sensor (%)</li> <li>- Transmission output speed</li> <li>- Sport switch</li> <li>- Air conditioner switch</li> <li>- Automatic transmission power supply</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Selector lever position</li> <li>- Gearshift solenoid 3</li> <li>- Sportronic switch upshift</li> <li>- Sportronic switch downshift</li> <li>- Operating switch speed</li> <li>- Dry-running operation function</li> <li>- Slip rotation speed torque converter bridging</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Gearshift solenoid 4</li> <li>- Solenoid shift valve SLT pressure</li> <li>- Solenoid shift valve SLC 1 current</li> <li>- Solenoid shift valve SLC 2 current</li> <li>- Solenoid shift valve SLU current</li> <li>- MIL requested by fault code</li> <li>- Shift lock solenoid valve</li> <li>- Feedback solenoid valve 1</li> <li>- Feedback solenoid valve 2</li> <li>- Feedback solenoid valve 3</li> <li>- Feedback solenoid valve 4</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid valve 1</li> <li>- Solenoid valve 2</li> <li>- Solenoid valve 3</li> <li>- Solenoid valve 4</li> <li>- solenoid valve relay</li> <li>- Throttle linear solenoid, sw. solenoid valve</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLC 1</li> <li>- Solenoid shift valve SLC 2</li> </ul> </li> </ul>
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HYUNDAI				Genesis - Genesis 4.6i	
Year	Engine	Liters	HP	System	Functions
2008/09 -		4.6	380	Gear box control 6-gears automatic transmission HIVEC 5.4	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- solenoid valve relay</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Transmission</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Gas pedal position sensor (%)</li> <li>- Transmission output speed</li> <li>- Sport switch</li> <li>- Air conditioner switch</li> <li>- Automatic transmission power supply</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Selector lever position</li> <li>- Gearshift solenoid 3</li> <li>- Sportronic switch upshift</li> <li>- Sportronic switch downshift</li> <li>- Operating switch speed</li> <li>- Dry-running operation function</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Gearshift solenoid 4</li> <li>- Solenoid shift valve SLT pressure</li> <li>- Solenoid shift valve SLC 1 current</li> <li>- Solenoid shift valve SLC 2 current</li> <li>- Solenoid shift valve SLU current</li> <li>- MIL requested by fault code</li> <li>- Shift lock solenoid valve</li> <li>- Feedback solenoid valve 1</li> <li>- Feedback solenoid valve 2</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Feedback solenoid valve 3</li> <li>- Feedback solenoid valve 4</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid valve 1</li> <li>- Solenoid valve 2</li> <li>- Solenoid valve 3</li> <li>- Solenoid valve 4</li> <li>- solenoid valve relay</li> <li>- Throttle linear solenoid, sw. solenoid valve</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLC 1</li> <li>- Solenoid shift valve SLC 2</li> </ul> </li> </ul>
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<b>HYUNDAI</b>	<b>Genesis [BH] - Genesis 3.8</b>
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Year	Engine	Liters	HP	System	Functions
2008/05 -		3.8	290	Gear box control 6-gears automatic transmission HIVEC 5.4	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- solenoid valve relay</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Transmission</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Gas pedal position sensor (%)</li> <li>- Transmission output speed</li> <li>- Sport switch</li> <li>- Air conditioner switch</li> <li>- Automatic transmission power supply</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Selector lever position</li> <li>- Gearshift solenoid 3</li> <li>- Sportronic switch upshift</li> <li>- Sportronic switch downshift</li> <li>- Operating switch speed</li> <li>- Dry-running operation function</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Gearshift solenoid 4</li> <li>- Solenoid shift valve SLT pressure</li> <li>- Solenoid shift valve SLC 1 current</li> <li>- Solenoid shift valve SLC 2 current</li> <li>- Solenoid shift valve SLU current</li> <li>- MIL requested by fault code</li> <li>- Shift lock solenoid valve</li> <li>- Feedback solenoid valve 1</li> <li>- Feedback solenoid valve 2</li> <li>- Feedback solenoid valve 3</li> <li>- Feedback solenoid valve 4</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid valve 1</li> <li>- Solenoid valve 2</li> <li>- Solenoid valve 3</li> <li>- Solenoid valve 4</li> <li>- solenoid valve relay</li> <li>- Throttle linear solenoid, sw. solenoid valve</li> </ul> </li> </ul>

- Switch solenoid valve SLU
- Solenoid shift valve SLC 1
- Solenoid shift valve SLC 2

HYUNDAI					Genesis [BK] Coupe - Genesis 3.8 Coupe	
Year	Engine	Liters	HP	System	Functions	
2010/09 -	G6DA	3.8	303	Gear box control 6-gears automatic transmission HIVEC 5.4	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- solenoid valve relay</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Transmission</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Gas pedal position sensor (%)</li> <li>- Transmission output speed</li> <li>- Sport switch</li> <li>- Air conditioner switch</li> <li>- Automatic transmission power supply</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Selector lever position</li> <li>- Gearshift solenoid 3</li> <li>- Sportronic switch upshift</li> <li>- Sportronic switch downshift</li> <li>- Operating switch speed</li> <li>- Dry-running operation function</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Gearshift solenoid 4</li> <li>- Solenoid shift valve SLT pressure</li> <li>- Solenoid shift valve SLC 1 current</li> <li>- Solenoid shift valve SLC 2 current</li> <li>- Solenoid shift valve SLU current</li> <li>- MIL requested by fault code</li> <li>- Shift lock solenoid valve</li> <li>- Feedback solenoid valve 1</li> <li>- Feedback solenoid valve 2</li> <li>- Feedback solenoid valve 3</li> <li>- Feedback solenoid valve 4</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid valve 1</li> <li>- Solenoid valve 2</li> <li>- Solenoid valve 3</li> <li>- Solenoid valve 4</li> <li>- solenoid valve relay</li> <li>- Throttle linear solenoid, sw. solenoid valve</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLC 1</li> <li>- Solenoid shift valve SLC 2</li> </ul> </li> </ul>	

HYUNDAI					Genesis [BK] Coupe - Genesis 2.0 T Coupe	
Year	Engine	Liters	HP	System	Functions	

2010/09 -	G4KF	2.0	214	Gear box control 6-gears automatic transmission HIVEC 5.4	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- solenoid valve relay</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Transmission</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Gas pedal position sensor (%)</li> <li>- Transmission output speed</li> <li>- Sport switch</li> <li>- Air conditioner switch</li> <li>- Automatic transmission power supply</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Selector lever position</li> <li>- Gearshift solenoid 3</li> <li>- Sportronic switch upshift</li> <li>- Sportronic switch downshift</li> <li>- Operating switch speed</li> <li>- Dry-running operation function</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Gearshift solenoid 4</li> <li>- Solenoid shift valve SLT pressure</li> <li>- Solenoid shift valve SLC 1 current</li> <li>- Solenoid shift valve SLC 2 current</li> <li>- Solenoid shift valve SLU current</li> <li>- MIL requested by fault code</li> <li>- Shift lock solenoid valve</li> <li>- Feedback solenoid valve 1</li> <li>- Feedback solenoid valve 2</li> <li>- Feedback solenoid valve 3</li> <li>- Feedback solenoid valve 4</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid valve 1</li> <li>- Solenoid valve 2</li> <li>- Solenoid valve 3</li> <li>- Solenoid valve 4</li> <li>- solenoid valve relay</li> <li>- Throttle linear solenoid, sw. solenoid valve</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLC 1</li> <li>- Solenoid shift valve SLC 2</li> </ul> </li> </ul>
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HYUNDAI					Genesis [BK] Coupe - Genesis Coupe 2.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Throttle valve position (bank 2)</li> <li>- Voltage, throttle valve position sensor</li> <li>- Vehicle driving speed</li> </ul> </li> </ul>	



- Coolant temperature sensor voltage
- Contact switch
- Fuel pump relay
- Coolant temperature
- Pulse-duty factor, fuel tank ventilation valve
- Input air quantity meter
- Throttle valve position sensor
- Idle regulator
- signal, throttle valve
- Engine revolution
- engine loading
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- idle signal
- intake manifold pressure
- turbo charger pressure
- Air conditioner compressor relay
- air quantity
- Clutch switch
- recommended idle revolutions
- start signal
- Immobilizer
- Fuel shut-off solenoid valve
- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3
- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status

2008/10	Theta 2.0	2.0	209	Engine control Theta 2.0	<ul style="list-style-type: none"> <li>- Coolant temperature sensor, primary</li> <li>- Coolant temperature sensor, secondary</li> <li>- Gas pedal position sensor (%)</li> <li>- Fuel level in the tank</li> <li>- Throttle valves servo motor control</li> <li>- Throttle valve servo motor position</li> <li>- Cooling agent temperature motor</li> <li>- Gas pedal position sensor 1 Voltage</li> <li>- Gas pedal position sensor 2 Voltage</li> <li>- Ignition angle Cylinder 1</li> <li>- Camshaft intake valves (bank 1), resultant value</li> <li>- Camshaft exhaust valves (bank 1), actual value</li> <li>- Camshaft exhaust valves (bank 1), resultant value</li> <li>- Outdoor temperature sensor voltage</li> <li>- Transmission, specified torque</li> <li>- Lambda target value</li> <li>- Lambda actual value</li> <li>- harmful for catalytic converter lack of combustion cylinder 1</li> <li>- harmful for catalytic converter lack of combustion cylinder 2</li> <li>- harmful for catalytic converter lack of combustion cylinder 3</li> <li>- harmful for catalytic converter lack of combustion cylinder 4</li> <li>- Air conditioner switch</li> <li>- Air conditioner status</li> <li>- Catalytic converter heating status</li> <li>- test</li> <li>- Oxygen sensor heater (bank 1, sensor 1)</li> <li>- Oxygen sensor heater (bank 1, sensor 2)</li> <li>- transmission type coding</li> <li>- Brake test switch</li> <li>- Intake camshaft position actual value</li> <li>- Cooling agent pressure</li> <li>- Intake camshaft adjustment, set angle</li> <li>- Calculated cooling agent temperature</li> <li>- Metered engine oil temperature</li> <li>- Fuel level signal 2</li> <li>- Atmospheric pressure voltage sensor</li> <li>- Camshaft control</li> <li>- Charging-air pressure sensor voltage</li> <li>- Intake camshaft control, adaptation</li> <li>- Status electronic fuel pump</li> <li>- Lambda adaption status: Idle</li> <li>- Inlet camsh. timing control status</li> <li>- Exhaust camsh. timing contr. status</li> <li>- Atmospheric pressure sensor</li> <li>- Kilometer reading at MIL activation</li> <li>- Mileage in km on last maintenance</li> <li>- Power steering pressure</li> <li>- Magnetic valve camshaft adjustment</li> <li>- Torque converter-slip speed</li> <li>- Knock sensor test</li> <li>- A/C compressor status</li> <li>- Overtemperature protection</li> <li>- Alternator torque request</li> <li>- Throttle valve motor duty cycle 1</li> <li>- Battery status</li> <li>- Requested specified idling speed</li> <li>- Lambda sensor adaptation: Current timer offset</li> <li>- Knock detonation, offset adjustment adaption, cylinder 1</li> <li>- Knock detonation, offset adjustment adaption, cylinder 2</li> <li>- Knock detonation, offset adjustment adaption, cylinder 3</li> </ul>
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- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination
- Turbo charger bypass valve
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Long-term additive mixture correct.
- Long-term multiplic. mixture correc.
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position
- **Actuators**
  - Fuel pump relay
  - Signal lamp for representing defect, engine control
  - Engine for reg. throttle valve
  - Injector (cylinder 1)
  - Injector (cylinder 2)
  - Injector (cylinder 4)
  - Injector (cylinder 4)
  - solenoid A turbo pressure restriction
  - fuel tank evaporation/regeneration valve
  - Main relay
  - air conditioner compressor relay
  - Exhaust camsh.control sol. valve
  - Intake camshaft control, solenoid valve
  - Switchable intake manifold, solenoid valve
  - Lambda probe heating (B1, S1)
  - Lambda probe heating (B1, S2)
  - Immobilizer, warning light
  - Ignition coil Cylinder 1
  - Ignition coil Cylinder 2

					<ul style="list-style-type: none"> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Variable intake valves control</li> <li>- Fuel evaporation cut-off valve</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Camshaft adjustment solenoid valve</li> <li>- Turbo charger bypass valve</li> </ul>
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<b>HYUNDAI</b>	<b>Grandeur HG - Grandeur HG 2.4 GDI</b>
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Year	Engine	Liters	HP	System	Functions
				Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Engine revolution</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Transmission selector levers switch</li> <li>- Pressure control solenoid valve</li> <li>- Torque converter clutch status</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Voltage at main relay</li> <li>- Transmission control fault lamp</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Pressure control solenoid valve A</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Evaporative emissions control system</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Reset all adaptation values</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Coolant temperature sensor voltage</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- Coolant temperature</li> <li>- Pulse-duty factor, fuel tank ventilation valve</li> <li>- Engine revolution</li> <li>- engine loading</li> <li>- stop lights switch</li> <li>- intake manifold pressure</li> <li>- recommended idle revolutions</li> <li>- Immobilizer</li> <li>- Servo steering wheel pressure sensor</li> </ul> </li> </ul>

2011/02  
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Theta II 2.4  
GDI

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Engine control

- system power supply
- Main relay
- injected quantity adj. resistor
- engine oil temperature
- Lambda compensation
- Ambient temperature sensor
- Rail pressure, nominal
- Rail pressure, actual
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Gas pedal position sensor (%)
- Fuel level in the tank
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Ignition angle Cylinder 2
- Ignition angle Cylinder 3
- Ignition angle Cylinder 4
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), resultant value
- Lambda target value
- Lambda actual value
- Cruise control, control light
- System in fail safe
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Cruise control indicator lamp SET
- Catalytic converter heating status
- Brake test switch
- Cooling agent pressure
- Metered engine oil temperature
- Fuel pressure sensor voltage
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Fuel level gauge

Theta 2.0 GDI

- Torque converter-slip speed
- Fuel pressure control valve
- Knock sensor test
- Minimum operating voltage
- A/C compressor status
- Noise/vibration reduction
- Overtemperature protection
- Fuel pressure control difference
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1
  - Knock detonation, offset adjustment adaption, cylinder 2
  - Knock detonation, offset adjustment adaption, cylinder 3
  - Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Fuel pressure regulator opening angle
- Fuel pressure regulator closing angle
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel tank pressure control valve
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Status speed control
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Coolant temp. at engine start
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position
- Injection time cylinder 1 (homogeneous)
- Injection time cylinder 2 (homogeneous)
- Injection time cylinder 3 (homogeneous)
- Injection time cylinder 4 (homogeneous)
- Injection time cylinder 1 (stratified charge)
- Injection time cylinder 2 (stratified charge)
- Injection time cylinder 3 (stratified charge)
- Injection time cylinder 4 (stratified charge)
- **Actuators**
  - Fuel pump relay
  - Signal lamp for representing defect, engine control
  - Engine for reg. throttle valve
  - Injector (cylinder 1)

					<ul style="list-style-type: none"> <li>- Injector (cylinder 2)</li> <li>- Injector (cylinder 4)</li> <li>- Injector (cylinder 4)</li> <li>- fuel tank evaporation/regeneration valve</li> <li>- Main relay</li> <li>- Exhaust camsh.control sol. valve</li> <li>- Intake camshaft control, solenoid valve</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Lambda probe heating (B1, S1)</li> <li>- Lambda probe heating (B1, S2)</li> <li>- Speed control light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Fuel evaporation shutoff valve</li> <li>- Fuel evaporation cut-off valve</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Fuel pressure regulation</li> <li>- Cruise control indicator lamp SET</li> </ul>
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HYUNDAI					Grandeur HG - Grandeur HG 3.0 GDi	
Year	Engine	Liters	HP	System	Functions	
2011/02 -	Lambda II 3.0 GDI	3.0	271	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Engine revolution</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Transmission selector levers switch</li> <li>- Pressure control solenoid valve</li> <li>- Torque converter clutch status</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Voltage at main relay</li> <li>- Transmission control fault lamp</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Pressure control solenoid valve A</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> </ul> </li> </ul>	

HYUNDAI					Grandeur TG - Grandeur TG 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> </ul>	

- **Error memory**

- **Current values**

- Throttle valve position (bank 2)
- Voltage, throttle valve position sensor
- Vehicle driving speed
- Coolant temperature sensor voltage
- Contact switch
- Fuel pump relay
- Coolant temperature
- Pulse-duty factor, fuel tank ventilation valve
- Input air quantity meter
- Throttle valve position sensor
- Idle regulator
- signal, throttle valve
- Engine revolution
- engine loading
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- idle signal
- intake manifold pressure
- turbo charger pressure
- Air conditioner compressor relay
- air quantity
- Clutch switch
- recommended idle revolutions
- start signal
- Immobilizer
- Fuel shut-off solenoid valve
- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3



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Theta II 2.4

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Engine control  
Theta 2.0

- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption,

cylinder 1

- Knock detonation, offset adjustment adaption,

cylinder 2

- Knock detonation, offset adjustment adaption,

cylinder 3

- Knock detonation, offset adjustment adaption,

cylinder 4

- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination
- Turbo charger bypass valve
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Long-term additive mixture correct.
- Long-term multiplic. mixture correc.
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position

• **Actuators**

- Fuel pump relay
- Signal lamp for representing defect, engine

control

- Engine for reg. throttle valve
- Injector (cylinder 1)
- Injector (cylinder 2)
- Injector (cylinder 4)
- Injector (cylinder 4)
- solenoid A turbo pressure restriction
- fuel tank evaporation/regeneration valve
- Main relay
- air conditioner compressor relay
- Exhaust camsh.control sol. valve
- Intake camshaft control, solenoid valve
- Switchable intake manifold, solenoid valve

					<ul style="list-style-type: none"> <li>- Lambda probe heating (B1, S1)</li> <li>- Lambda probe heating (B1, S2)</li> <li>- Immobilizer, warning light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Variable intake valves control</li> <li>- Fuel evaporation cut-off valve</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Camshaft adjustment solenoid valve</li> <li>- Turbo charger bypass valve</li> </ul>
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HYUNDAI						Santa Fe New - Santa Fe New 2.2 VGT CRDi					
Year	Engine	Liters	HP	System		Functions					
2005/11 -	HTI	2.2	208	Gear box control 5-gears automatic transmission HIVEC 4.2		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Engine revolution</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Electronic control unit supply voltage</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- Shut-off solenoid valve 2/4</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Shut-off solenoid valve 2/4</li> </ul> </li> </ul>					

HYUNDAI						Santa Fe [CM] - Santa Fe 2.2 CRDi 4x4					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> </ul>					

2006/03 - 2009/11	D4EB	2.2	150 - 155	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Throttle valve position sensor</li> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- switch, gear, upward</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Oil temperature sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Transformer bridging magnetic valve</li> <li>- Pressure control solenoid valve</li> <li>- Gear shift lever position</li> <li>- Torque converter-slip speed</li> <li>- Kickdown switch status</li> <li>- Pre-selected gear</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Sports mode</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- Pressure-regulation magnetic valve</li> <li>- Solenoid switch valve F</li> <li>- Torque converter clutch solenoid valve</li> </ul> </li> </ul>
				Gear box control 5-gears automatic transmission HIVEC 4.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Engine revolution</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Electronic control unit supply voltage</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- Shut-off solenoid valve 2/4</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

					<ul style="list-style-type: none"> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Shut-off solenoid valve 2/4</li> </ul>
2009/11 -	D4HB	2.2	197	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Throttle valve position sensor</li> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- switch. gear, upward</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Oil temperature sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Transformer bridging magnetic valve</li> <li>- Pressure control solenoid valve</li> <li>- Gear shift lever position</li> <li>- Torque converter-slip speed</li> <li>- Kickdown switch status</li> <li>- Pre-selected gear</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Sports mode</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- Pressure-regulation magnetic valve</li> <li>- Solenoid switch valve F</li> <li>- Torque converter clutch solenoid valve</li> </ul> </li> </ul>

HYUNDAI					Santa Fe [CM] - Santa Fe 2.2 CRDi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Throttle valve position sensor</li> </ul> </li> </ul>	

2006/03 - 2009/11	D4EB	2.2	150 - 155	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- switch. gear, upward</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Oil temperature sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Transformer bridging magnetic valve</li> <li>- Pressure control solenoid valve</li> <li>- Gear shift lever position</li> <li>- Torque converter-slip speed</li> <li>- Kickdown switch status</li> <li>- Pre-selected gear</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Sports mode</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- Pressure-regulation magnetic valve</li> <li>- Solenoid switch valve F</li> <li>- Torque converter clutch solenoid valve</li> </ul> </li> </ul>
				Gear box control 5-gears automatic transmission HIVEC 4.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Engine revolution</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Electronic control unit supply voltage</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- Shut-off solenoid valve 2/4</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Shut-off solenoid valve 2/4</li> </ul>
2009/11 -	D4HB	2.2	197	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Throttle valve position sensor</li> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- switch. gear, upward</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Oil temperature sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Transformer bridging magnetic valve</li> <li>- Pressure control solenoid valve</li> <li>- Gear shift lever position</li> <li>- Torque converter-slip speed</li> <li>- Kickdown switch status</li> <li>- Pre-selected gear</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Sports mode</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- Pressure-regulation magnetic valve</li> <li>- Solenoid switch valve F</li> <li>- Torque converter clutch solenoid valve</li> </ul> </li> </ul>

HYUNDAI					Santa Fe [CM] - Santa Fe 2.7i 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Throttle valve position sensor</li> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- switch. gear, upward</li> </ul> </li> </ul>	

2006/03 - 2009/11	G6EA	2.7	170 - 189	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Oil temperature sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Transformer bridging magnetic valve</li> <li>- Pressure control solenoid valve</li> <li>- Gear shift lever position</li> <li>- Torque converter-slip speed</li> <li>- Kickdown switch status</li> <li>- Pre-selected gear</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Sports mode</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- Pressure-regulation magnetic valve</li> <li>- Solenoid switch valve F</li> <li>- Torque converter clutch solenoid valve</li> </ul> </li> </ul>
				Gear box control 5-gears automatic transmission HIVEC 4.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Engine revolution</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Electronic control unit supply voltage</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- Shut-off solenoid valve 2/4</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> </ul> </li> </ul>



- Magnetic valve for cruising gear
- Brake tape reduction magnetic valve
- Power supply relay gearbox
- Shut-off solenoid valve 2/4

**HYUNDAI Santa Fe [CM] - Santa Fe 2.7i**

Year	Engine	Liters	HP	System	Functions
2006/03 - 2009/11	G6EA	2.7	170 - 189	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Throttle valve position sensor</li> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- switch, gear, upward</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Oil temperature sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Transformer bridging magnetic valve</li> <li>- Pressure control solenoid valve</li> <li>- Gear shift lever position</li> <li>- Torque converter-slip speed</li> <li>- Kickdown switch status</li> <li>- Pre-selected gear</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Sports mode</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- Pressure-regulation magnetic valve</li> <li>- Solenoid switch valve F</li> <li>- Torque converter clutch solenoid valve</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Engine revolution</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> </ul> </li> </ul>

				<p>Gear box control 5-gears automatic transmission HIVEC 4.2</p>	<ul style="list-style-type: none"> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Electronic control unit supply voltage</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- Shut-off solenoid valve 2/4</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Shut-off solenoid valve 2/4</li> </ul>
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HYUNDAI					Santa Fe [CM] - Santa Fe 2.4i	
Year	Engine	Liters	HP	System	Functions	
2009/11 -	G4KE	2.4	174	<p>Gear box control 6-gears automatic transmission HIVEC 5.5</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Throttle valve position sensor</li> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- switch. gear, upward</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Oil temperature sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Transformer bridging magnetic valve</li> <li>- Pressure control solenoid valve</li> <li>- Gear shift lever position</li> <li>- Torque converter-slip speed</li> <li>- Kickdown switch status</li> <li>- Pre-selected gear</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Sports mode</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- Pressure-regulation magnetic valve</li> <li>- Solenoid switch valve F</li> <li>- Torque converter clutch solenoid valve</li> </ul>
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HYUNDAI						Santa Fe [CM] - Santa Fe 2.4i 4x4					
Year	Engine	Liters	HP	System		Functions					
2009/11 -	G4KE	2.4	174	Gear box control 6-gears automatic transmission HIVEC 5.5		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Throttle valve position sensor</li> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- switch. gear, upward</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Oil temperature sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Transformer bridging magnetic valve</li> <li>- Pressure control solenoid valve</li> <li>- Gear shift lever position</li> <li>- Torque converter-slip speed</li> <li>- Kickdown switch status</li> <li>- Pre-selected gear</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Sports mode</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- Pressure-regulation magnetic valve</li> <li>- Solenoid switch valve F</li> <li>- Torque converter clutch solenoid valve</li> </ul> </li> </ul>					

HYUNDAI						Santa Fe [CM] - Santa Fe 2.0 CRDi					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Throttle valve position sensor</li> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> </ul> </li> </ul>					

2010/09 -	D4HA	2.0	150	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> <li>- switch, brakes</li> <li>- switch. gear, upward</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Oil temperature sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Transformer bridging magnetic valve</li> <li>- Pressure control solenoid valve</li> <li>- Gear shift lever position</li> <li>- Torque converter-slip speed</li> <li>- Kickdown switch status</li> <li>- Pre-selected gear</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Sports mode</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- Pressure-regulation magnetic valve</li> <li>- Solenoid switch valve F</li> <li>- Torque converter clutch solenoid valve</li> </ul> </li> </ul>
				Gear box control 5-gears automatic transmission HIVEC 4.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Engine revolution</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Electronic control unit supply voltage</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- Shut-off solenoid valve 2/4</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Shut-off solenoid valve 2/4</li> </ul>
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**HYUNDAI** **Santa Fe [CM] - Santa Fe 2.0 CRDi 4x4**

Year	Engine	Liters	HP	System	Functions
2010/09 -	D4HA	2.0	150	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Throttle valve position sensor</li> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- switch. gear, upward</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Oil temperature sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Transformer bridging magnetic valve</li> <li>- Pressure control solenoid valve</li> <li>- Gear shift lever position</li> <li>- Torque converter-slip speed</li> <li>- Kickdown switch status</li> <li>- Pre-selected gear</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Sports mode</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- Pressure-regulation magnetic valve</li> <li>- Solenoid switch valve F</li> <li>- Torque converter clutch solenoid valve</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Engine revolution</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> </ul> </li> </ul>

				<p>Gear box control 5-gears automatic transmission HIVEC 4.2</p>	<ul style="list-style-type: none"> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Electronic control unit supply voltage</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- Shut-off solenoid valve 2/4</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Shut-off solenoid valve 2/4</li> </ul>
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HYUNDAI					
Santa Fe [CM] - Santa Fe 3.5i 24V					
Year	Engine	Liters	HP	System	Functions
2010/10 -		3.5	286	<p>Gear box control 6-gears automatic transmission HIVEC 5.5</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Throttle valve position sensor</li> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- switch, gear, upward</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Oil temperature sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Transformer bridging magnetic valve</li> <li>- Pressure control solenoid valve</li> <li>- Gear shift lever position</li> <li>- Torque converter-slip speed</li> <li>- Kickdown switch status</li> <li>- Pre-selected gear</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Sports mode</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- Pressure-regulation magnetic valve</li> <li>- Solenoid switch valve F</li> <li>- Torque converter clutch solenoid valve</li> </ul>
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**HYUNDAI** **Santa Fe [CM] - Santa Fe 3.5i 24V 4x4**

Year	Engine	Liters	HP	System	Functions
2010/10 -		3.5	286	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Throttle valve position sensor</li> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- switch. gear, upward</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Oil temperature sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Transformer bridging magnetic valve</li> <li>- Pressure control solenoid valve</li> <li>- Gear shift lever position</li> <li>- Torque converter-slip speed</li> <li>- Kickdown switch status</li> <li>- Pre-selected gear</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Sports mode</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- Pressure-regulation magnetic valve</li> <li>- Solenoid switch valve F</li> <li>- Torque converter clutch solenoid valve</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Engine revolution</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> </ul> </li> </ul>

				<p>Gear box control 5-gears automatic transmission HIVEC 4.2</p>	<ul style="list-style-type: none"> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Electronic control unit supply voltage</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- Shut-off solenoid valve 2/4</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Shut-off solenoid valve 2/4</li> </ul> </li> </ul>
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HYUNDAI					Solaris [RB] - Solaris 1.4	
Year	Engine	Liters	HP	System	Functions	
2011/01 -	G4FA	1.4	107	<p>Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Engine revolution</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Transmission selector levers switch</li> <li>- Pressure control solenoid valve</li> <li>- Torque converter clutch status</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Voltage at main relay</li> <li>- Transmission control fault lamp</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Pressure control solenoid valve A</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> </ul> </li> </ul>	



HYUNDAI				Solaris [RB] - Solaris 1.6	
Year	Engine	Liters	HP	System	Functions
2011/01 -	G4FC	1.6	122 - 124	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Engine revolution</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Transmission selector levers switch</li> <li>- Pressure control solenoid valve</li> <li>- Torque converter clutch status</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Voltage at main relay</li> <li>- Transmission control fault lamp</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Pressure control solenoid valve A</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> </ul> </li> </ul>

HYUNDAI				Solaris [RB] Hatchback - Solaris 1.4 Hatchback	
Year	Engine	Liters	HP	System	Functions
2011/01 -	G4FA	1.4	107	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Engine revolution</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Transmission selector levers switch</li> <li>- Pressure control solenoid valve</li> <li>- Torque converter clutch status</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Voltage at main relay</li> <li>- Transmission control fault lamp</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Pressure control solenoid valve A</li> <li>- Torque converter clutch solenoid valve</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> </ul>
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**HYUNDAI Solaris [RB] Hatchback - Solaris 1.6 Hatchback**

Year	Engine	Liters	HP	System	Functions
2011/01 -	G4FC	1.6	122	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Engine revolution</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Transmission selector levers switch</li> <li>- Pressure control solenoid valve</li> <li>- Torque converter clutch status</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Voltage at main relay</li> <li>- Transmission control fault lamp</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Pressure control solenoid valve A</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> </ul> </li> </ul>

**HYUNDAI Sonata [NF] - Sonata 2.0 CRDi**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- kick-down switch</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> </ul> </li> </ul>

2006/01 - 2007/12	D4EA	2.0	136 - 143	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Shift release</li> <li>- Converter slip rotating speed</li> <li>- Gearshift solenoid 3</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Operating mode switch</li> <li>- Driving mode</li> <li>- Target Gear</li> <li>- Gear hold button</li> <li>- Clutch damper solenoid valve</li> <li>- AT-air control magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Gearshift solenoid 5</li> <li>- Gearshift solenoid 4</li> <li>- Pressure control solenoid 1 status</li> <li>- Pressure control solenoid 2 status</li> <li>- Pressure control solenoid 3 status</li> <li>- Pressure control solenoid 4 status</li> <li>- Pressure control solenoid 5 status</li> <li>- Syst. press. solen. valve duty cycle</li> <li>- Torque conv. lock-up clutch status</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- Press. build-up/reduc. solenoid valve</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Torque converter clutch solenoid valve</li> <li>- Gear indicator lamp D1</li> <li>- Gear indicator lamp D2</li> <li>- Gear indicator lamp D3</li> <li>- Gear indicator lamp D4</li> <li>- Gear indicator lamp D5</li> </ul> </li> </ul>
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HYUNDAI					Sonata [NF] - Sonata 2.0 VGT CRDi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- kick-down switch</li> <li>- Magnetic valve for reverse gear lock</li> </ul> </li> </ul>	

2006/01  
-  
2007/10

2.0

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Gear box control  
4/5-gears automatic transmission HIVEC 5.2

- Engine revolution
- switch, brakes
- cruise control switch
- gear box oil temperature
- gears engagement control
- Solenoid valve: direct gear direct gear
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Tiptronic switch: identification
- Overdrive solenoid valve
- Gear lever position
- Gearbox input speed
- MIL-Status
- Transmission output speed
- Switch for overdrive deactivation
- Engine torque
- Gearshift solenoid 1
- Gearshift solenoid 2
- Shift release
- Converter slip rotating speed
- Gearshift solenoid 3
- Magnetic valve for crawling speed
- solenoid brake band
- Operating mode switch
- Driving mode
- Target Gear
- Gear hold button
- Clutch damper solenoid valve
- AT-air control magnetic valve
- Power supply relay gearbox
- Gearshift solenoid 5
- Gearshift solenoid 4
- Pressure control solenoid 1 status
- Pressure control solenoid 2 status
- Pressure control solenoid 3 status
- Pressure control solenoid 4 status
- Pressure control solenoid 5 status
- Syst. press. solen. valve duty cycle
- Torque conv. lock-up clutch status
- **Actuators**
  - Magnetic valve for reverse gear lock
  - Solenoid valve: direct gear direct gear
  - Magnetic valve for crawling speed
  - Press. build-up/reduc. solenoid valve
  - solenoid brake band
  - Magnetic valve for cruising gear
  - Brake tape reduction magnetic valve
  - Power supply relay gearbox
  - Pressure-regulation magnetic valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Torque converter clutch solenoid valve
  - Gear indicator lamp D1
  - Gear indicator lamp D2
  - Gear indicator lamp D3
  - Gear indicator lamp D4
  - Gear indicator lamp D5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
- **Error memory**
- **Current values**
  - Air compressor request
  - Vehicle driving speed

2007/11 -	I4D	2.0	151	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- kick-down switch</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Shift release</li> <li>- Converter slip rotating speed</li> <li>- Gearshift solenoid 3</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Operating mode switch</li> <li>- Driving mode</li> <li>- Target Gear</li> <li>- Gear hold button</li> <li>- Clutch damper solenoid valve</li> <li>- AT-air control magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Gearshift solenoid 5</li> <li>- Gearshift solenoid 4</li> <li>- Pressure control solenoid 1 status</li> <li>- Pressure control solenoid 2 status</li> <li>- Pressure control solenoid 3 status</li> <li>- Pressure control solenoid 4 status</li> <li>- Pressure control solenoid 5 status</li> <li>- Syst. press. solen. valve duty cycle</li> <li>- Torque conv. lock-up clutch status</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- Press. build-up/reduc. solenoid valve</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Torque converter clutch solenoid valve</li> <li>- Gear indicator lamp D1</li> <li>- Gear indicator lamp D2</li> <li>- Gear indicator lamp D3</li> <li>- Gear indicator lamp D4</li> <li>- Gear indicator lamp D5</li> </ul> </li> </ul>
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Year	Engine	Liters	HP	System	Functions
2005/04 - 2007/10	I4	2.0	140	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- kick-down switch</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Shift release</li> <li>- Converter slip rotating speed</li> <li>- Gearshift solenoid 3</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Operating mode switch</li> <li>- Driving mode</li> <li>- Target Gear</li> <li>- Gear hold button</li> <li>- Clutch damper solenoid valve</li> <li>- AT-air control magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Gearshift solenoid 5</li> <li>- Gearshift solenoid 4</li> <li>- Pressure control solenoid 1 status</li> <li>- Pressure control solenoid 2 status</li> <li>- Pressure control solenoid 3 status</li> <li>- Pressure control solenoid 4 status</li> <li>- Pressure control solenoid 5 status</li> <li>- Syst. press. solen. valve duty cycle</li> <li>- Torque conv. lock-up clutch status</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- Press. build-up/reduc. solenoid valve</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Torque converter clutch solenoid valve</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Gear indicator lamp D1</li> <li>- Gear indicator lamp D2</li> <li>- Gear indicator lamp D3</li> <li>- Gear indicator lamp D4</li> <li>- Gear indicator lamp D5</li> </ul>
			Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- kick-down switch</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> </ul> </li> </ul>

2007/11 -	I4	2.0	140	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Shift release</li> <li>- Converter slip rotating speed</li> <li>- Gearshift solenoid 3</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Operating mode switch</li> <li>- Driving mode</li> <li>- Target Gear</li> <li>- Gear hold button</li> <li>- Clutch damper solenoid valve</li> <li>- AT-air control magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Gearshift solenoid 5</li> <li>- Gearshift solenoid 4</li> <li>- Pressure control solenoid 1 status</li> <li>- Pressure control solenoid 2 status</li> <li>- Pressure control solenoid 3 status</li> <li>- Pressure control solenoid 4 status</li> <li>- Pressure control solenoid 5 status</li> <li>- Syst. press. solen. valve duty cycle</li> <li>- Torque conv. lock-up clutch status</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- Press. build-up/reduc. solenoid valve</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Torque converter clutch solenoid valve</li> <li>- Gear indicator lamp D1</li> <li>- Gear indicator lamp D2</li> <li>- Gear indicator lamp D3</li> <li>- Gear indicator lamp D4</li> <li>- Gear indicator lamp D5</li> </ul>
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HYUNDAI					Sonata [NF] - Sonata 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- kick-down switch</li> <li>- Magnetic valve for reverse gear lock</li> </ul> </li> </ul>	



Gear box control  
4/5-gears automatic transmission HIVEC 5.2

- Engine revolution
- switch, brakes
- cruise control switch
- gear box oil temperature
- gears engagement control
- Solenoid valve: direct gear direct gear
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Tiptronic switch: identification
- Overdrive solenoid valve
- Gear lever position
- Gearbox input speed
- MIL-Status
- Transmission output speed
- Switch for overdrive deactivation
- Engine torque
- Gearshift solenoid 1
- Gearshift solenoid 2
- Shift release
- Converter slip rotating speed
- Gearshift solenoid 3
- Magnetic valve for crawling speed
- solenoid brake band
- Operating mode switch
- Driving mode
- Target Gear
- Gear hold button
- Clutch damper solenoid valve
- AT-air control magnetic valve
- Power supply relay gearbox
- Gearshift solenoid 5
- Gearshift solenoid 4
- Pressure control solenoid 1 status
- Pressure control solenoid 2 status
- Pressure control solenoid 3 status
- Pressure control solenoid 4 status
- Pressure control solenoid 5 status
- Syst. press. solen. valve duty cycle
- Torque conv. lock-up clutch status
- **Actuators**
  - Magnetic valve for reverse gear lock
  - Solenoid valve: direct gear direct gear
  - Magnetic valve for crawling speed
  - Press. build-up/reduc. solenoid valve
  - solenoid brake band
  - Magnetic valve for cruising gear
  - Brake tape reduction magnetic valve
  - Power supply relay gearbox
  - Pressure-regulation magnetic valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Torque converter clutch solenoid valve
  - Gear indicator lamp D1
  - Gear indicator lamp D2
  - Gear indicator lamp D3
  - Gear indicator lamp D4
  - Gear indicator lamp D5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
- **Error memory**
- **Current values**
  - Air compressor request
  - Vehicle driving speed

Gear box control  
HIVEC 2.1

- throttle valve position
- Switch idle mode
- Magnetic valve for reverse gear lock
- Engine revolution
- switch, brakes
- engine torque
- cruise control switch
- gear box oil temperature
- gears engagement control
- Solenoid valve: direct gear direct gear
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Tiptronic switch: identification
- Overdrive solenoid valve
- Gear lever position
- Gearbox input speed
- Transmission output speed
- Automatic transmission power supply
- Converter slip rotating speed
- Magnetic valve for crawling speed
- solenoid brake band
- Mode switch Hold
- AT-air control magnetic valve
- Brake tape reduction magnetic valve
- **Actuators**
  - Magnetic valve for reverse gear lock
  - Solenoid valve: direct gear direct gear
  - Magnetic valve for crawling speed
  - solenoid brake band
  - Magnetic valve for cruising gear
  - Power supply relay
  - Brake tape reduction magnetic valve

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
- **Error memory**
- **Current values**
  - Throttle valve position (bank 2)
  - Voltage, throttle valve position sensor
  - Vehicle driving speed
  - Coolant temperature sensor voltage
  - Contact switch
  - Fuel pump relay
  - Coolant temperature
  - Pulse-duty factor, fuel tank ventilation valve
  - Input air quantity meter
  - Throttle valve position sensor
  - Idle regulator
  - signal, throttle valve
  - Engine revolution
  - engine loading
  - stop lights switch
  - Knock control, cylinder 1
  - Knock control, cylinder 2
  - Knock control, cylinder 3
  - Knock control, cylinder 4
  - idle signal
  - intake manifold pressure
  - turbo charger pressure
  - Air conditioner compressor relay
  - air quantity
  - Clutch switch
  - recommended idle revolutions
  - start signal
  - Immobilizer
  - Fuel shut-off solenoid valve

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2.4

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- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3
- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4

Engine control  
Theta 2.0

- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1
- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3
- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2

					<ul style="list-style-type: none"> <li>- Camshaft / Crankshaft synchronization</li> <li>- Missfire detection counter Cylinder 1</li> <li>- Missfire detection counter Cylinder 2</li> <li>- Missfire detection counter Cylinder 3</li> <li>- Missfire detection counter Cylinder 4</li> <li>- Inlet camshaft timing control, duty cycle</li> <li>- Exhaust camshaft timing control, duty cycle</li> <li>- Fuel level sensor</li> <li>- Intake air pressure</li> <li>- Voltage intake air pressure sensor</li> <li>- Coolant temp. at engine start</li> <li>- Camshaft adjustment key combination</li> <li>- Turbo charger bypass valve</li> <li>- Throttle valve sensor reference voltage</li> <li>- Throttle valve fully closed</li> <li>- Long-term additive mixture correct.</li> <li>- Long-term multiplic. mixture correc.</li> <li>- Battery charge/discharge current</li> <li>- Battery current sensor voltage</li> <li>- Exhaust camshaft control position</li> <li>- Inlet camshaft control position</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Signal lamp for representing defect, engine control</li> <li>- Engine for reg. throttle valve</li> <li>- Injector (cylinder 1)</li> <li>- Injector (cylinder 2)</li> <li>- Injector (cylinder 4)</li> <li>- Injector (cylinder 4)</li> <li>- solenoid A turbo pressure restriction</li> <li>- fuel tank evaporation/regeneration valve</li> <li>- Main relay</li> <li>- air conditioner compressor relay</li> <li>- Exhaust camsh.control sol. valve</li> <li>- Intake camshaft control, solenoid valve</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Lambda probe heating (B1, S1)</li> <li>- Lambda probe heating (B1, S2)</li> <li>- Immobilizer, warning light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Variable intake valves control</li> <li>- Fuel evaporation cut-off valve</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Camshaft adjustment solenoid valve</li> <li>- Turbo charger bypass valve</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> </ul> </li> </ul>

<p>2004/09 - 2007/10</p>		<p>2.4</p>	<p>166</p>	<p>Gear box control HIVEC 2.1</p>	<ul style="list-style-type: none"> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>
				<p>Gear box control HIVEC 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> </ul>

- Adaptive parameters reset
- **Error memory**
- **Current values**
  - Throttle valve position (bank 2)
  - Voltage, throttle valve position sensor
  - Vehicle driving speed
  - Coolant temperature sensor voltage
  - Contact switch
  - Fuel pump relay
  - Coolant temperature
  - Pulse-duty factor, fuel tank ventilation valve
  - Input air quantity meter
  - Throttle valve position sensor
  - Idle regulator
  - signal, throttle valve
  - Engine revolution
  - engine loading
  - stop lights switch
  - Knock control, cylinder 1
  - Knock control, cylinder 2
  - Knock control, cylinder 3
  - Knock control, cylinder 4
  - idle signal
  - intake manifold pressure
  - turbo charger pressure
  - Air conditioner compressor relay
  - air quantity
  - Clutch switch
  - recommended idle revolutions
  - start signal
  - Immobilizer
  - Fuel shut-off solenoid valve
  - fuel tank evaporation/regeneration valve
  - Servo steering wheel pressure sensor
  - system power supply
  - detonations signal
  - switch steering wheel servo
  - Main relay
  - engine oil temperature
  - Lambda compensation
  - Adaptation idle regulator
  - stop lights switch
  - Intake air temperature
  - Fan 1 control
  - Fan 2 control
  - Battery voltage activation
  - Throttle valve position sensor 1
  - Oxygen sensor voltage (bank 1-sensor 1)
  - Oxygen sensor voltage (bank 1-sensor 2)
  - Throttle valve position sensor 2
  - Misfire, cylinder 1
  - Misfire, cylinder 2
  - Misfire, cylinder 3
  - Misfire, cylinder 4
  - Adjust. idle
  - Accumulation time, ignition coil cylinder 1
  - Accumulation time, ignition coil cylinder 2
  - Accumulation time, ignition coil cylinder 3
  - Accumulation time, ignition coil cylinder 4
  - Oxygen sensor heater (bank 1/2, sensor 1)
  - Oxygen sensor heater (bank 1/2, sensor 2)
  - Short-term mixture correction, bank 1
  - O2 sens. heat. (B1, S1) heat. time
  - Oxygen sensor heating (bank 1, sensor 2), heating time
  - Stopping valve, fuel evaporation system
  - Injection time, cylinder 1
  - Injection time, cylinder 2

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Engine control  
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- Injection time, cylinder 3
- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset



- Knock detonation, offset adjustment adaption, cylinder 1
- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3
- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination
- Turbo charger bypass valve
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Long-term additive mixture correct.
- Long-term multiplic. mixture correc.
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position
- **Actuators**
- Fuel pump relay
- Signal lamp for representing defect, engine control
- Engine for reg. throttle valve
- Injector (cylinder 1)
- Injector (cylinder 2)
- Injector (cylinder 4)
- Injector (cylinder 4)
- solenoid A turbo pressure restriction
- fuel tank evaporation/regeneration valve
- Main relay
- air conditioner compressor relay
- Exhaust camsh.control sol. valve
- Intake camshaft control, solenoid valve

					<ul style="list-style-type: none"> <li>- Switchable intake manifold, solenoid valve</li> <li>- Lambda probe heating (B1, S1)</li> <li>- Lambda probe heating (B1, S2)</li> <li>- Immobilizer, warning light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Variable intake valves control</li> <li>- Fuel evaporation cut-off valve</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Camshaft adjustment solenoid valve</li> <li>- Turbo charger bypass valve</li> </ul>
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<b>HYUNDAI</b>	<b>Sonata [NF] - Sonata 2.0i</b>
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Year	Engine	Liters	HP	System	Functions
				Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- kick-down switch</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Shift release</li> <li>- Convertor slip rotating speed</li> <li>- Gearshift solenoid 3</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Operating mode switch</li> <li>- Driving mode</li> <li>- Target Gear</li> <li>- Gear hold button</li> <li>- Clutch damper solenoid valve</li> <li>- AT-air control magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Gearshift solenoid 5</li> <li>- Gearshift solenoid 4</li> <li>- Pressure control solenoid 1 status</li> <li>- Pressure control solenoid 2 status</li> <li>- Pressure control solenoid 3 status</li> <li>- Pressure control solenoid 4 status</li> </ul> </li> </ul>

- Pressure control solenoid 5 status
- Syst. press. solen. valve duty cycle
- Torque conv. lock-up clutch status

• **Actuators**

- Magnetic valve for reverse gear lock
- Solenoid valve: direct gear direct gear
- Magnetic valve for crawling speed
- Press. build-up/reduc. solenoid valve
- solenoid brake band
- Magnetic valve for cruising gear
- Brake tape reduction magnetic valve
- Power supply relay gearbox
- Pressure-regulation magnetic valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Torque converter clutch solenoid valve
- Gear indicator lamp D1
- Gear indicator lamp D2
- Gear indicator lamp D3
- Gear indicator lamp D4
- Gear indicator lamp D5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset

• **Error memory**

• **Current values**

- Throttle valve position (bank 2)
- Voltage, throttle valve position sensor
- Vehicle driving speed
- Coolant temperature sensor voltage
- Contact switch
- Fuel pump relay
- Coolant temperature
- Pulse-duty factor, fuel tank ventilation valve
- Input air quantity meter
- Throttle valve position sensor
- Idle regulator
- signal, throttle valve
- Engine revolution
- engine loading
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- idle signal
- intake manifold pressure
- turbo charger pressure
- Air conditioner compressor relay
- air quantity
- Clutch switch
- recommended idle revolutions
- start signal
- Immobilizer
- Fuel shut-off solenoid valve
- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator

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Engine control  
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- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3
- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value

- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1
- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3
- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure

					<ul style="list-style-type: none"> <li>- Voltage intake air pressure sensor</li> <li>- Coolant temp. at engine start</li> <li>- Camshaft adjustment key combination</li> <li>- Turbo charger bypass valve</li> <li>- Throttle valve sensor reference voltage</li> <li>- Throttle valve fully closed</li> <li>- Long-term additive mixture correct.</li> <li>- Long-term multiplic. mixture correc.</li> <li>- Battery charge/discharge current</li> <li>- Battery current sensor voltage</li> <li>- Exhaust camshaft control position</li> <li>- Inlet camshaft control position</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Signal lamp for representing defect, engine control</li> <li>- Engine for reg. throttle valve</li> <li>- Injector (cylinder 1)</li> <li>- Injector (cylinder 2)</li> <li>- Injector (cylinder 4)</li> <li>- Injector (cylinder 4)</li> <li>- solenoid A turbo pressure restriction</li> <li>- fuel tank evaporation/regeneration valve</li> <li>- Main relay</li> <li>- air conditioner compressor relay</li> <li>- Exhaust camsh.control sol. valve</li> <li>- Intake camshaft control, solenoid valve</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Lambda probe heating (B1, S1)</li> <li>- Lambda probe heating (B1, S2)</li> <li>- Immobilizer, warning light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Variable intake valves control</li> <li>- Fuel evaporation cut-off valve</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Camshaft adjustment solenoid valve</li> <li>- Turbo charger bypass valve</li> </ul> </li> </ul>
2004/09 - 2007/10		2.0	144	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>
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<b>HYUNDAI</b>	<b>Sonata [YF] - Sonata 2.0</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Throttle valve position (bank 2)</li> <li>- Voltage, throttle valve position sensor</li> <li>- Vehicle driving speed</li> <li>- Coolant temperature sensor voltage</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- Coolant temperature</li> <li>- Pulse-duty factor, fuel tank ventilation valve</li> <li>- Input air quantity meter</li> <li>- Throttle valve position sensor</li> <li>- Idle regulator</li> <li>- signal, throttle valve</li> <li>- Engine revolution</li> <li>- engine loading</li> <li>- stop lights switch</li> <li>- Knock control, cylinder 1</li> <li>- Knock control, cylinder 2</li> <li>- Knock control, cylinder 3</li> <li>- Knock control, cylinder 4</li> <li>- idle signal</li> <li>- intake manifold pressure</li> <li>- turbo charger pressure</li> <li>- Air conditioner compressor relay</li> <li>- air quantity</li> <li>- Clutch switch</li> <li>- recommended idle revolutions</li> <li>- start signal</li> <li>- Immobilizer</li> <li>- Fuel shut-off solenoid valve</li> <li>- fuel tank evaporation/regeneration valve</li> <li>- Servo steering wheel pressure sensor</li> <li>- system power supply</li> <li>- detonations signal</li> <li>- switch steering wheel servo</li> <li>- Main relay</li> <li>- engine oil temperature</li> <li>- Lambda compensation</li> <li>- Adaptation idle regulator</li> <li>- stop lights switch</li> <li>- Intake air temperature</li> <li>- Fan 1 control</li> </ul> </li> </ul>

				<p>Engine control Theta 2.0</p>	<ul style="list-style-type: none"> <li>- Fan 2 control</li> <li>- Battery voltage activation</li> <li>- Throttle valve position sensor 1</li> <li>- Oxygen sensor voltage (bank 1-sensor 1)</li> <li>- Oxygen sensor voltage (bank 1-sensor 2)</li> <li>- Throttle valve position sensor 2</li> <li>- Misfire, cylinder 1</li> <li>- Misfire, cylinder 2</li> <li>- Misfire, cylinder 3</li> <li>- Misfire, cylinder 4</li> <li>- Adjust. idle</li> <li>- Accumulation time, ignition coil cylinder 1</li> <li>- Accumulation time, ignition coil cylinder 2</li> <li>- Accumulation time, ignition coil cylinder 3</li> <li>- Accumulation time, ignition coil cylinder 4</li> <li>- Oxygen sensor heater (bank 1/2, sensor 1)</li> <li>- Oxygen sensor heater (bank 1/2, sensor 2)</li> <li>- Short-term mixture correction, bank 1</li> <li>- O2 sens. heat. (B1, S1) heat. time</li> <li>- Oxygen sensor heating (bank 1, sensor 2), heating time</li> <li>- Stopping valve, fuel evaporation system</li> <li>- Injection time, cylinder 1</li> <li>- Injection time, cylinder 2</li> <li>- Injection time, cylinder 3</li> <li>- Injection time, cylinder 4</li> <li>- Engine operation detected</li> <li>- Cooling agent pressure sensor</li> <li>- intake manifold pressure sensor</li> <li>- MIL-Status</li> <li>- Coolant temperature sensor, primary</li> <li>- Coolant temperature sensor, secondary</li> <li>- Gas pedal position sensor (%)</li> <li>- Fuel level in the tank</li> <li>- Throttle valves servo motor control</li> <li>- Throttle valve servo motor position</li> <li>- Cooling agent temperature motor</li> <li>- Gas pedal position sensor 1 Voltage</li> <li>- Gas pedal position sensor 2 Voltage</li> <li>- Ignition angle Cylinder 1</li> <li>- Camshaft intake valves (bank 1), resultant value</li> <li>- Camshaft exhaust valves (bank 1), actual value</li> <li>- Camshaft exhaust valves (bank 1), resultant value</li> <li>- Outdoor temperature sensor voltage</li> <li>- Transmission, specified torque</li> <li>- Lambda target value</li> <li>- Lambda actual value</li> <li>- harmful for catalytic converter lack of combustion cylinder 1</li> <li>- harmful for catalytic converter lack of combustion cylinder 2</li> <li>- harmful for catalytic converter lack of combustion cylinder 3</li> <li>- harmful for catalytic converter lack of combustion cylinder 4</li> <li>- Air conditioner switch</li> <li>- Air conditioner status</li> <li>- Catalytic converter heating status</li> <li>- test</li> <li>- Oxygen sensor heater (bank 1, sensor 1)</li> <li>- Oxygen sensor heater (bank 1, sensor 2)</li> <li>- transmission type coding</li> <li>- Brake test switch</li> <li>- Intake camshaft position actual value</li> <li>- Cooling agent pressure</li> <li>- Intake camshaft adjustment, set angle</li> <li>- Calculated cooling agent temperature</li> </ul>
2009/09	Theta II 2.0 MPI	2.0	165		



- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1
- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3
- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination

					<ul style="list-style-type: none"> <li>- Turbo charger bypass valve</li> <li>- Throttle valve sensor reference voltage</li> <li>- Throttle valve fully closed</li> <li>- Long-term additive mixture correct.</li> <li>- Long-term multiplic. mixture correc.</li> <li>- Battery charge/discharge current</li> <li>- Battery current sensor voltage</li> <li>- Exhaust camshaft control position</li> <li>- Inlet camshaft control position</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Signal lamp for representing defect, engine control</li> <li>- Engine for reg. throttle valve</li> <li>- Injector (cylinder 1)</li> <li>- Injector (cylinder 2)</li> <li>- Injector (cylinder 4)</li> <li>- Injector (cylinder 4)</li> <li>- solenoid A turbo pressure restriction</li> <li>- fuel tank evaporation/regeneration valve</li> <li>- Main relay</li> <li>- air conditioner compressor relay</li> <li>- Exhaust camsh.control sol. valve</li> <li>- Intake camshaft control, solenoid valve</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Lambda probe heating (B1, S1)</li> <li>- Lambda probe heating (B1, S2)</li> <li>- Immobilizer, warning light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Variable intake valves control</li> <li>- Fuel evaporation cut-off valve</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Camshaft adjustment solenoid valve</li> <li>- Turbo charger bypass valve</li> </ul> </li> </ul>
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HYUNDAI					Sonata [YF] - Sonata 2.4 GDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Evaporative emissions control system</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Reset all adaptation values</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Coolant temperature sensor voltage</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- Coolant temperature</li> <li>- Pulse-duty factor, fuel tank ventilation valve</li> <li>- Engine revolution</li> <li>- engine loading</li> <li>- stop lights switch</li> <li>- intake manifold pressure</li> <li>- recommended idle revolutions</li> <li>- Immobilizer</li> <li>- Servo steering wheel pressure sensor</li> <li>- system power supply</li> <li>- Main relay</li> </ul> </li> </ul>	

2010/02  
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Theta II 2.4  
GDI

2.4

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Engine control  
Theta 2.0 GDI

- injected quantity adj. resistor
- engine oil temperature
- Lambda compensation
- Ambient temperature sensor
- Rail pressure, nominal
- Rail pressure, actual
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Gas pedal position sensor (%)
- Fuel level in the tank
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Ignition angle Cylinder 2
- Ignition angle Cylinder 3
- Ignition angle Cylinder 4
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), resultant value
- Lambda target value
- Lambda actual value
- Cruise control, control light
- System in fail safe
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Cruise control indicator lamp SET
- Catalytic converter heating status
- Brake test switch
- Cooling agent pressure
- Metered engine oil temperature
- Fuel pressure sensor voltage
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Fuel level gauge
- Torque converter-slip speed
- Fuel pressure control valve

- Knock sensor test
- Minimum operating voltage
- A/C compressor status
- Noise/vibration reduction
- Overtemperature protection
- Fuel pressure control difference
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1
- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3
- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Fuel pressure regulator opening angle
- Fuel pressure regulator closing angle
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel tank pressure control valve
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Status speed control
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Coolant temp. at engine start
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position
- Injection time cylinder 1 (homogeneous)
- Injection time cylinder 2 (homogeneous)
- Injection time cylinder 3 (homogeneous)
- Injection time cylinder 4 (homogeneous)
- Injection time cylinder 1 (stratified charge)
- Injection time cylinder 2 (stratified charge)
- Injection time cylinder 3 (stratified charge)
- Injection time cylinder 4 (stratified charge)
- **Actuators**
- Fuel pump relay
- Signal lamp for representing defect, engine control
- Engine for reg. throttle valve
- Injector (cylinder 1)
- Injector (cylinder 2)
- Injector (cylinder 4)

					<ul style="list-style-type: none"> <li>- Injector (cylinder 4)</li> <li>- fuel tank evaporation/regeneration valve</li> <li>- Main relay</li> <li>- Exhaust camsh.control sol. valve</li> <li>- Intake camshaft control, solenoid valve</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Lambda probe heating (B1, S1)</li> <li>- Lambda probe heating (B1, S2)</li> <li>- Speed control light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Fuel evaporation shutoff valve</li> <li>- Fuel evaporation cut-off valve</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Fuel pressure regulation</li> <li>- Cruise control indicator lamp SET</li> </ul>
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<b>HYUNDAI</b>	<b>Sonata [YF] - Sonata 2.0 LPI</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Coolant temperature sensor voltage</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- Fuel temperature</li> <li>- engine loading</li> <li>- stop lights switch</li> <li>- fuel-air mixture</li> <li>- Immobilizer</li> <li>- Main relay</li> <li>- Lambda compensation</li> <li>- Intake air temperature</li> <li>- Fan 1 control</li> <li>- Fan 2 control</li> <li>- Battery voltage activation</li> <li>- Throttle valve position sensor 1</li> <li>- Oxygen sensor voltage (bank 1-sensor 1)</li> <li>- Oxygen sensor voltage (bank 1-sensor 2)</li> <li>- Throttle valve position sensor 2</li> <li>- Misfire, cylinder 1</li> <li>- Misfire, cylinder 2</li> <li>- Misfire, cylinder 3</li> <li>- Misfire, cylinder 4</li> <li>- Oxygen sensor heater (bank 1/2, sensor 1)</li> <li>- Oxygen sensor heater (bank 1/2, sensor 2)</li> <li>- Oil temperature sensor</li> <li>- O2 sens. heat. (B1, S1) heat. time</li> <li>- Oxygen sensor heating (bank 1, sensor 2), heating time</li> <li>- Injection time, cylinder 1</li> <li>- Injection time, cylinder 2</li> <li>- Injection time, cylinder 3</li> <li>- Injection time, cylinder 4</li> <li>- Cooling agent pressure sensor</li> <li>- Clutch pedal switch</li> <li>- MIL-Status</li> <li>- Gas pedal position sensor 1 (V)</li> </ul> </li> </ul>

2009/09 -	Theta II 2.0 LPI	2.0	144	Engine control Theta 2.0 LPI	<ul style="list-style-type: none"> <li>- Gas pedal position sensor 2(V)</li> <li>- Gas pedal position sensor (%)</li> <li>- Cooling agent temperature motor</li> <li>- Ignition angle Cylinder 1</li> <li>- Ignition angle Cylinder 2</li> <li>- Ignition angle Cylinder 3</li> <li>- Ignition angle Cylinder 4</li> <li>- Lambda target value</li> <li>- Lambda actual value</li> <li>- harmful for catalytic converter lack of combustion cylinder 1</li> <li>- harmful for catalytic converter lack of combustion cylinder 2</li> <li>- harmful for catalytic converter lack of combustion cylinder 3</li> <li>- harmful for catalytic converter lack of combustion cylinder 4</li> <li>- Air conditioner switch</li> <li>- Air conditioner status</li> <li>- Catalytic converter heating status</li> <li>- Air conditioner compressor request</li> <li>- Brake test switch</li> <li>- Cooling agent pressure</li> <li>- Voltage fuel temperature sensor</li> <li>- Status electronic fuel pump</li> <li>- Lambda adaption status: Idle</li> <li>- Atmospheric pressure sensor</li> <li>- Kilometer reading at MIL activation</li> <li>- Mileage in km on last maintenance</li> <li>- Power steering pressure</li> <li>- Ignition voltage supply</li> <li>- Liquefied petroleum gas switch</li> <li>- Torque converter-slip speed</li> <li>- Engine running</li> <li>- Knock sensor test</li> <li>- Overtemperature protection</li> <li>- Electric fuel pump control unit actuation</li> <li>- Alternator torque request</li> <li>- Throttle valve motor duty cycle 1</li> <li>- Battery status</li> <li>- Lambda sensor adaptation: Current timer offset</li> <li>- Knock detonation, offset adjustment adaption, cylinder 1</li> <li>- Knock detonation, offset adjustment adaption, cylinder 2</li> <li>- Knock detonation, offset adjustment adaption, cylinder 3</li> <li>- Knock detonation, offset adjustment adaption, cylinder 4</li> <li>- Intake air temperature on engine start</li> <li>- Time since ignition ON</li> <li>- Throttle valve angle: set value</li> <li>- Battery ageing</li> <li>- Lambda control (b1): Part load adaptation value</li> <li>- Alternator monitoring deactivation by wiper</li> <li>- Alternator monitoring deactivation by blower</li> <li>- Alternator monitoring deactivation by headlights</li> <li>- Fuel system diagnosis status</li> <li>- Gas rail pressure sensor</li> <li>- Battery temperature</li> <li>- Oxygen sensor status (B1, S1)</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- EKP PWM</li> <li>- Lambda control status</li> <li>- Engine speed status</li> <li>- Battery capacity</li> <li>- Intake air temperature sensor voltage</li> <li>- Throttle valve position: Full load</li> </ul>
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					<ul style="list-style-type: none"> <li>- PWM Generator</li> <li>- Throttle valve position 1</li> <li>- Throttle valve position 2</li> <li>- Camshaft / Crankshaft synchronization</li> <li>- Gas rail pressure</li> <li>- Intake air pressure</li> <li>- Voltage intake air pressure sensor</li> <li>- Coolant temp. at engine start</li> <li>- Ignition angle correction, knock regul., cyl. 1</li> <li>- Ignition angle correction, knock regul., cyl. 2</li> <li>- Ignition angle correction, knock regul., cyl. 3</li> <li>- Ignition angle correction, knock regul., cyl. 4</li> <li>- Throttle valve sensor reference voltage</li> <li>- Throttle valve fully closed</li> <li>- Engine speed request</li> <li>- Battery charge/discharge current</li> <li>- Battery current sensor voltage</li> <li>- Gas operation indicator lamp</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Fuel shut-off solenoid valve 2</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Signal lamp for representing defect, engine control</li> <li>- Fan radiator 1 relay</li> <li>- Fan radiator 2 relay</li> <li>- Engine for reg. throttle valve</li> <li>- Main relay</li> <li>- air conditioner compressor relay</li> <li>- Liquefied petroleum gas indicator lamp</li> <li>- Lambda probe heating (B1/2, S1)</li> <li>- Lambda probe heating (B1/2, S2)</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Fuel shut-off solenoid valve 2</li> <li>- Fuel injector Cylinder 1</li> <li>- Fuel injector Cylinder 2</li> <li>- Fuel injector Cylinder 3</li> <li>- Fuel injector Cylinder 4</li> </ul> </li> </ul>
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HYUNDAI Tiburon [GK, GS] - Tiburon 2.0					
Year	Engine	Liters	HP	System	Functions
2003/01 - 2008/08		2.0	140	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Transmission output speed</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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<b>HYUNDAI</b>	<b>Tucson - Tucson 2.0 VGT CRDi</b>
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Year	Engine	Liters	HP	System	Functions
2005/12 -		2.0	156	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- kick-down switch</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Shift release</li> <li>- Convertor slip rotating speed</li> <li>- Gearshift solenoid 3</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Operating mode switch</li> <li>- Driving mode</li> <li>- Target Gear</li> <li>- Gear hold button</li> <li>- Clutch damper solenoid valve</li> <li>- AT-air control magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Gearshift solenoid 5</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Gearshift solenoid 4</li> <li>- Pressure control solenoid 1 status</li> <li>- Pressure control solenoid 2 status</li> <li>- Pressure control solenoid 3 status</li> <li>- Pressure control solenoid 4 status</li> <li>- Pressure control solenoid 5 status</li> <li>- Syst. press. solen. valve duty cycle</li> <li>- Torque conv. lock-up clutch status</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- Press. build-up/reduc. solenoid valve</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Torque converter clutch solenoid valve</li> <li>- Gear indicator lamp D1</li> <li>- Gear indicator lamp D2</li> <li>- Gear indicator lamp D3</li> <li>- Gear indicator lamp D4</li> <li>- Gear indicator lamp D5</li> </ul> </li> </ul>
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HYUNDAI					Tucson [JM] - Tucson 2.0i	
Year	Engine	Liters	HP	System	Functions	
2004/09 - 2010/03	G4GC	2.0	141	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul>
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HYUNDAI					Tuscani - Tuscani 2.0i	
Year	Engine	Liters	HP	System	Functions	
2001/09 -		2.0	143	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>	

HYUNDAI					Veracruz - Veracruz 3.0 V6 CRDi-VGT	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Neutral position initialization</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>	

2006/10 -	S	3.0	239	<p>Gear box control 6-gears automatic transmission HIVEC 5.3</p>	<ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Switch idle mode</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Transmission</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Engine torque</li> <li>- Transmission selector lever position</li> <li>- Converter slip rotating speed</li> <li>- Switch magnetic valve C monitoring</li> <li>- Solenoid valve: fuel-line pressure</li> <li>- Solenoid valve: Pipe pressure, monitoring</li> <li>- Solenoid valve: Torque converter lock-up clutch</li> <li>- SV: TC lock-up clutch, monitoring</li> <li>- Fault codes count</li> <li>- Current switch magnetic valve C</li> <li>- Solenoid shift valve D current</li> <li>- Solenoid shift valve E current</li> <li>- Solenoid shift valve F current</li> <li>- Solenoid shift valve D monitoring</li> <li>- Solenoid shift valve E monitoring</li> <li>- Solenoid shift valve F monitoring</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- Solenoid valve: fuel-line pressure</li> <li>- Solenoid switch valve F</li> <li>- Torque converter clutch solenoid valve</li> </ul> </li> </ul>
				<p>Gear box control</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- solenoid valve relay</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Transmission</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Gas pedal position sensor (%)</li> <li>- Transmission output speed</li> <li>- Sport switch</li> <li>- Air conditioner switch</li> <li>- Automatic transmission power supply</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Selector lever position</li> <li>- Gearshift solenoid 3</li> </ul> </li> </ul>

			<p>6-gears automatic transmission HIVEC 5.4</p>	<ul style="list-style-type: none"> <li>- Sportronic switch upshift</li> <li>- Sportronic switch downshift</li> <li>- Operating switch speed</li> <li>- Dry-running operation function</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Gearshift solenoid 4</li> <li>- Solenoid shift valve SLT pressure</li> <li>- Solenoid shift valve SLC 1 current</li> <li>- Solenoid shift valve SLC 2 current</li> <li>- Solenoid shift valve SLU current</li> <li>- MIL requested by fault code</li> <li>- Shift lock solenoid valve</li> <li>- Feedback solenoid valve 1</li> <li>- Feedback solenoid valve 2</li> <li>- Feedback solenoid valve 3</li> <li>- Feedback solenoid valve 4</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid valve 1</li> <li>- Solenoid valve 2</li> <li>- Solenoid valve 3</li> <li>- Solenoid valve 4</li> <li>- solenoid valve relay</li> <li>- Throttle linear solenoid, sw. solenoid valve</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLC 1</li> <li>- Solenoid shift valve SLC 2</li> </ul> </li> </ul>
		<p>Gear box control 5-gears automatic transmission HIVEC 4.2</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Engine revolution</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Electronic control unit supply voltage</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- Shut-off solenoid valve 2/4</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Shut-off solenoid valve 2/4</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Gear box control 6-gears automatic transmission HIVEC 5.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Neutral position initialization</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Switch idle mode</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Transmission</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Engine torque</li> <li>- Transmission selector lever position</li> <li>- Converter slip rotating speed</li> <li>- Switch magnetic valve C monitoring</li> <li>- Solenoid valve: fuel-line pressure</li> <li>- Solenoid valve: Pipe pressure, monitoring</li> <li>- Solenoid valve: Torque converter lock-up clutch</li> <li>- SV: TC lock-up clutch, monitoring</li> <li>- Fault codes count</li> <li>- Current switch magnetic valve C</li> <li>- Solenoid shift valve D current</li> <li>- Solenoid shift valve E current</li> <li>- Solenoid shift valve F current</li> <li>- Solenoid shift valve D monitoring</li> <li>- Solenoid shift valve E monitoring</li> <li>- Solenoid shift valve F monitoring</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- Solenoid valve: fuel-line pressure</li> <li>- Solenoid switch valve F</li> <li>- Torque converter clutch solenoid valve</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- solenoid valve relay</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> </ul> </li> </ul>

2006/09 -	3.8	260	<p>Gear box control 6-gears automatic transmission HIVEC 5.4</p>	<ul style="list-style-type: none"> <li>- Transmission</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Gas pedal position sensor (%)</li> <li>- Transmission output speed</li> <li>- Sport switch</li> <li>- Air conditioner switch</li> <li>- Automatic transmission power supply</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Selector lever position</li> <li>- Gearshift solenoid 3</li> <li>- Sportronic switch upshift</li> <li>- Sportronic switch downshift</li> <li>- Operating switch speed</li> <li>- Dry-running operation function</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Gearshift solenoid 4</li> <li>- Solenoid shift valve SLT pressure</li> <li>- Solenoid shift valve SLC 1 current</li> <li>- Solenoid shift valve SLC 2 current</li> <li>- Solenoid shift valve SLU current</li> <li>- MIL requested by fault code</li> <li>- Shift lock solenoid valve</li> <li>- Feedback solenoid valve 1</li> <li>- Feedback solenoid valve 2</li> <li>- Feedback solenoid valve 3</li> <li>- Feedback solenoid valve 4</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid valve 1</li> <li>- Solenoid valve 2</li> <li>- Solenoid valve 3</li> <li>- Solenoid valve 4</li> <li>- solenoid valve relay</li> <li>- Throttle linear solenoid, sw. solenoid valve</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLC 1</li> <li>- Solenoid shift valve SLC 2</li> </ul> </li> </ul>
			<p>Gear box control 5-gears automatic transmission HIVEC 4.2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Engine revolution</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Electronic control unit supply voltage</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- Shut-off solenoid valve 2/4</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

					<ul style="list-style-type: none"> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Shut-off solenoid valve 2/4</li> </ul>
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**HYUNDAI Veracruz - Veracruz 3.8 4x4**

Year	Engine	Liters	HP	System	Functions
				Gear box control 6-gears automatic transmission HIVEC 5.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Neutral position initialization</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Switch idle mode</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Transmission</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Engine torque</li> <li>- Transmission selector lever position</li> <li>- Converter slip rotating speed</li> <li>- Switch magnetic valve C monitoring</li> <li>- Solenoid valve: fuel-line pressure</li> <li>- Solenoid valve: Pipe pressure, monitoring</li> <li>- Solenoid valve: Torque converter lock-up clutch</li> <li>- SV: TC lock-up clutch, monitoring</li> <li>- Fault codes count</li> <li>- Current switch magnetic valve C</li> <li>- Solenoid shift valve D current</li> <li>- Solenoid shift valve E current</li> <li>- Solenoid shift valve F current</li> <li>- Solenoid shift valve D monitoring</li> <li>- Solenoid shift valve E monitoring</li> <li>- Solenoid shift valve F monitoring</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- Solenoid valve: fuel-line pressure</li> <li>- Solenoid switch valve F</li> <li>- Torque converter clutch solenoid valve</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

2006/09 -	3.8	260	<p>Gear box control 6-gears automatic transmission HIVEC 5.4</p>	<ul style="list-style-type: none"> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- solenoid valve relay</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Transmission</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Gas pedal position sensor (%)</li> <li>- Transmission output speed</li> <li>- Sport switch</li> <li>- Air conditioner switch</li> <li>- Automatic transmission power supply</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Selector lever position</li> <li>- Gearshift solenoid 3</li> <li>- Sportronic switch upshift</li> <li>- Sportronic switch downshift</li> <li>- Operating switch speed</li> <li>- Dry-running operation function</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Gearshift solenoid 4</li> <li>- Solenoid shift valve SLT pressure</li> <li>- Solenoid shift valve SLC 1 current</li> <li>- Solenoid shift valve SLC 2 current</li> <li>- Solenoid shift valve SLU current</li> <li>- MIL requested by fault code</li> <li>- Shift lock solenoid valve</li> <li>- Feedback solenoid valve 1</li> <li>- Feedback solenoid valve 2</li> <li>- Feedback solenoid valve 3</li> <li>- Feedback solenoid valve 4</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid valve 1</li> <li>- Solenoid valve 2</li> <li>- Solenoid valve 3</li> <li>- Solenoid valve 4</li> <li>- solenoid valve relay</li> <li>- Throttle linear solenoid, sw. solenoid valve</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLC 1</li> <li>- Solenoid shift valve SLC 2</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Engine revolution</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> </ul> </li> </ul>



				<p>Gear box control 5-gears automatic transmission HIVEC 4.2</p>	<ul style="list-style-type: none"> <li>- Overdrive solenoid valve</li> <li>- Electronic control unit supply voltage</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- Shut-off solenoid valve 2/4</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Shut-off solenoid valve 2/4</li> </ul>
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HYUNDAI					Verna - Verna 1.4i	
Year	Engine	Liters	HP	System	Functions	
				<p>Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Engine revolution</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Transmission selector levers switch</li> <li>- Pressure control solenoid valve</li> <li>- Torque converter clutch status</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Voltage at main relay</li> <li>- Transmission control fault lamp</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Pressure control solenoid valve A</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>	

2005/09 -	G4FA	1.4	95	<p>Gear box control 4-gears automatic transmission GS 12</p> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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HYUNDAI					Verna - Verna 1.4D	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Engine revolution</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> </ul> </li> </ul>	

2011/05 -	D4FC	1.4	90	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Transmission selector levers switch</li> <li>- Pressure control solenoid valve</li> <li>- Torque converter clutch status</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Voltage at main relay</li> <li>- Transmission control fault lamp</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Pressure control solenoid valve A</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> </ul>
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HYUNDAI				Verna - Verna 1.6D	
Year	Engine	Liters	HP	System	Functions
2011/05 -	D4FB	1.6	128	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Engine revolution</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Transmission selector levers switch</li> <li>- Pressure control solenoid valve</li> <li>- Torque converter clutch status</li> <li>- Slip rotation speed torque converter bridging</li> <li>- Voltage at main relay</li> <li>- Transmission control fault lamp</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Pressure control solenoid valve A</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> </ul> </li> </ul>

HYUNDAI				Verna - Verna 1.3i 8V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> </ul>

1999/06 - 2005/08	1.3	85	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Convertor slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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HYUNDAI Verna - Verna 1.5i 8V				
Year	Engine	Liters	HP	System Functions
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> </ul> </li> </ul>

1999/06 - 2002/07		1.5	96	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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HYUNDAI				Verna - Verna 1.5i 16V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> </ul> </li> </ul>

1999/06 - 2002/07	1.5	108	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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HYUNDAI				Verna - Verna 1.5 VGT	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> </ul> </li> </ul>

2005/09 -		1.5	152	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
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HYUNDAI				Verna - Verna 1.6i VVT	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> </ul> </li> </ul>

2005/09 -		1.6	112	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
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HYUNDAI					
Verna New - Verna New 1.3i					
Year	Engine	Liters	HP	System	Functions
2002/07 - 2005/09		1.3	85	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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HYUNDAI					Verna New - Verna New 1.5i	
Year	Engine	Liters	HP	System	Functions	
2002/07 - 2005/09		1.5	91	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
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HYUNDAI				i30 [FD, FDH] - i30 1.4	
Year	Engine	Liters	HP	System	Functions
2007/09 -	G4FA	1.4	105 - 109	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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HYUNDAI					i30 [FD, FDH] - i30 1.6	
Year	Engine	Liters	HP	System	Functions	
2007/09 -	G4FC	1.6	116 - 126	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> </ul>	

					<ul style="list-style-type: none"> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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<b>HYUNDAI</b>	<b>i30 [FD, FDH] - i30 2.0</b>
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Year	Engine	Liters	HP	System	Functions
2007/09 -	G4GC...	2.0	143	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Convertor slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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<b>HYUNDAI</b>	<b>i30 [FD, FDH] - i30 1.6 CRDi</b>
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Year	Engine	Liters	HP	System	Functions
2007/09 -	D4FB	1.6	110 - 116	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
2007/10 -	D4FB	1.6	90	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> </ul> </li> </ul>

2008/11 -	D4FB	1.6	128	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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HYUNDAI					i30 [FD, FDH] - i30 2.0 CRDi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> </ul> </li> </ul>	

2007/09 -	D4EA	2.0	136 - 140	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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HYUNDAI					i30 [FD, FDH] - i30 1.4 LPG	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> </ul> </li> </ul>	



2009/03 - 2010/12	G4FA	1.4	103 - 109	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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HYUNDAI				i30 [FD, FDH] - i30 1.6 LPG	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> </ul> </li> </ul>

2009/03 - 2010/12	G4FC	1.6	120	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
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HYUNDAI					i30 [FD, FDH] - i30 2.0 LPG	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> </ul> </li> </ul>	

2009/03 - 2010/12	G4GC	2.0	136	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- Switch for ovedrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
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HYUNDAI					
i30 [FD, FDH] CW - i30 1.6 CW					
Year	Engine	Liters	HP	System	Functions
2008/03 -	G4FC	1.6	116 - 126	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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HYUNDAI					i30 [FD, FDH] CW - i30 2.0 CW	
Year	Engine	Liters	HP	System	Functions	
2008/03 -	G4GC...	2.0	143	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Convertor slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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HYUNDAI				i30 [FD, FDH] CW - i30 1.6 CRDi CW	
Year	Engine	Liters	HP	System	Functions
2008/02 -	D4FB	1.6	116	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> </ul>

					<ul style="list-style-type: none"> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
2008/11 -	D4FB	1.6	128	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Convertor slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>

- Power supply relay gearbox
- Pressure-regulation magnetic valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3

**HYUNDAI i30 [FD, FDH] CW - i30 2.0 CRDi CW**

Year	Engine	Liters	HP	System	Functions
2008/03 -	D4EA	2.0	136 - 140	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Convertor slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>

HYUNDAI				i30 [FD, FDH] CW - i30 1.4 CW	
Year	Engine	Liters	HP	System	Functions
2009/08 -	G4FA	1.4	105 - 109	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Convertor slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>

HYUNDAI				i30 [FD, FDH] CW - i30 1.4 LPG CW	



Year	Engine	Liters	HP	System	Functions
2009/03 - 2010/12	G4FA	1.4	103	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>

**HYUNDAI**

**i30 [FD, FDH] CW - i30 1.6 LPG CW**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> </ul>

2009/03 - 2010/12	G4FC	1.6	120	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Convertor slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
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HYUNDAI					
i30 [FD, FDH] CW - i30 2.0 LPG CW					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> </ul> </li> </ul>

2009/03 - 2010/12	G4GC	2.0	136	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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HYUNDAI					ix35 [EL] - ix35 2.0	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Control unit reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor pressure signal</li> <li>- Air compressor request</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> </ul> </li> </ul>	

2010/01	G4KD	2.0	163 - 166	Engine control Theta 2.1	<ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Knock control, cylinder 1</li> <li>- Knock control, cylinder 2</li> <li>- Knock control, cylinder 3</li> <li>- Knock control, cylinder 4</li> <li>- fuel correction (bank 1)</li> <li>- Knock sensor 1 (bank 1)</li> <li>- Main relay</li> <li>- Throttle valve angle, potentiometer path 1</li> <li>- Throttle valve angle, potentiometer path 2</li> <li>- Intake air temperature</li> <li>- Ignition</li> <li>- Throttle valve position sensor 1</li> <li>- Throttle valve position sensor 2</li> <li>- Oxygen sensor bank 1, sensor 1)</li> <li>- Oxygen sensor (bank 1, sensor 2)</li> <li>- Pulse-duty factor, exhausted gases valve actuator</li> <li>- Engine operation detected</li> <li>- Clutch pedal switch</li> <li>- intake manifold pressure sensor</li> <li>- Pulse duty factor, intake manifold valve</li> <li>- Ambient pressure</li> <li>- MIL-Status</li> <li>- Switch identification</li> <li>- Throttle valves servo motor control</li> <li>- Idle running speed target value</li> <li>- Gas pedal position sensor 1 Voltage</li> <li>- Gas pedal position sensor 2 Voltage</li> <li>- Ignition angle Cylinder 1</li> <li>- Ignition angle Cylinder 2</li> <li>- Ignition angle Cylinder 3</li> <li>- Ignition angle Cylinder 4</li> <li>- Fuel evaporation control valve, spray rate</li> <li>- Short-term mix. correction B1 (OBD)</li> <li>- Lambda target value</li> <li>- Lambda actual value</li> <li>- Air conditioner pressure sensor voltage</li> <li>- harmful for catalytic converter lack of combustion cylinder 1</li> <li>- harmful for catalytic converter lack of combustion cylinder 2</li> <li>- harmful for catalytic converter lack of combustion cylinder 3</li> <li>- harmful for catalytic converter lack of combustion cylinder 4</li> <li>- Cruise control indicator lamp CRUISE</li> <li>- Cruise control indicator lamp SET</li> <li>- Lambda probe heating resistance (B1, S1)</li> <li>- Lambda probe heating resistance (B1, S2)</li> <li>- Air conditioner compressor control</li> <li>- Brake test switch</li> <li>- Oxygen sensor bank 1, sensor 1)</li> <li>- Oxygen sensor bank 2, sensor 1)</li> <li>- Cooling agent temperature voltage</li> <li>- Turbine wheel speed</li> <li>- Cruise control on/off switch</li> <li>- Engine speed actual value</li> <li>- Inlet camsh. timing control status</li> <li>- Kilometer reading at MIL activation</li> <li>- Gas pedal position</li> <li>- Telephone antenna signal strength</li> <li>- Control unit sensor voltage 4</li> <li>- Engine operating mode</li> <li>- Heated catalyst enabled</li> <li>- Mileage since fault memory cleared</li> <li>- Electric fuel pump control unit actuation</li> <li>- Inlet camshaft control test (b1): result</li> </ul>
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					<ul style="list-style-type: none"> <li>- Exhaust camshaft adjustment test B1: Result</li> <li>- Diagnostic connector VIM status</li> <li>- Intake air temperature on engine start</li> <li>- Time since ignition ON</li> <li>- Short-term oxygen sensor control adjustment</li> </ul> <p><b>B1</b></p> <ul style="list-style-type: none"> <li>- Throttle valve position: closed</li> <li>- Transmission oil temperature: calculated</li> <li>- AC start/stop authorization</li> <li>- Fan high speed</li> <li>- Fan low speed</li> <li>- Right overheating protection control unit</li> <li>- Inlet camshaft reset valve B1</li> <li>- Exhaust camshaft reset valve B1</li> <li>- Battery discharge status</li> <li>- Intake air temperature sensor voltage</li> <li>- Throttle valve position: Full load</li> <li>- Camshaft / Crankshaft synchronization</li> <li>- Missfire detection counter Cylinder 1</li> <li>- Missfire detection counter Cylinder 2</li> <li>- Missfire detection counter Cylinder 3</li> <li>- Missfire detection counter Cylinder 4</li> <li>- Control unit sensor voltage 3</li> <li>- Voltage intake air pressure sensor</li> <li>- Coolant temp. at engine start</li> <li>- Lambda control loop monitoring</li> <li>- Injection time/cylinder 1</li> <li>- Injection time/cylinder 2</li> <li>- Injection time/cylinder 3</li> <li>- Injection time/cylinder 4</li> <li>- Var. valve timing press. switch/exh.</li> <li>- Sensor reference voltage 1</li> <li>- Sensor reference voltage 2</li> <li>- Part load status</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Disconnection of fuel injector Cylinder 1</li> <li>- Disconnection of fuel injector Cylinder 2</li> <li>- Disconnection of fuel injector Cylinder 3</li> <li>- Disconnection of fuel injector Cylinder 4</li> <li>- Fuel pump relay</li> <li>- Engine for reg. throttle valve</li> <li>- Main relay</li> <li>- air conditioner compressor relay</li> <li>- Container valve</li> <li>- Engine management system error lights</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Exhaust camshaft timing control (bank 1)</li> <li>- Immobilizer control lamp</li> <li>- Speed control light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Oxygen sensor heating, sensor 1</li> <li>- Oxygen sensor heating, sensor 2</li> <li>- Variable intake system solenoid valve</li> </ul>
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HYUNDAI					ix35 [EL] - ix35 2.0 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> </ul>	

2010/01  
-

G4KD

2.0

163

Engine control  
Theta 2.1

- Control unit reset
- **Error memory**
- **Current values**
  - Air compressor pressure signal
  - Air compressor request
  - Power supply
  - Vehicle driving speed
  - Coolant temperature
  - Battery voltage
  - stop lights switch
  - Knock control, cylinder 1
  - Knock control, cylinder 2
  - Knock control, cylinder 3
  - Knock control, cylinder 4
  - fuel correction (bank 1)
  - Knock sensor 1 (bank 1)
  - Main relay
  - Throttle valve angle, potentiometer path 1
  - Throttle valve angle, potentiometer path 2
  - Intake air temperature
  - Ignition
  - Throttle valve position sensor 1
  - Throttle valve position sensor 2
  - Oxygen sensor bank 1, sensor 1)
  - Oxygen sensor (bank 1, sensor 2)
  - Pulse-duty factor, exhausted gases valve actuator
  - Engine operation detected
  - Clutch pedal switch
  - intake manifold pressure sensor
  - Pulse duty factor, intake manifold valve
  - Ambient pressure
  - MIL-Status
  - Switch identification
  - Throttle valves servo motor control
  - Idle running speed target value
  - Gas pedal position sensor 1 Voltage
  - Gas pedal position sensor 2 Voltage
  - Ignition angle Cylinder 1
  - Ignition angle Cylinder 2
  - Ignition angle Cylinder 3
  - Ignition angle Cylinder 4
  - Fuel evaporation control valve, spray rate
  - Short-term mix. correction B1 (OBD)
  - Lambda target value
  - Lambda actual value
  - Air conditioner pressure sensor voltage
  - harmful for catalytic converter lack of combustion cylinder 1
  - harmful for catalytic converter lack of combustion cylinder 2
  - harmful for catalytic converter lack of combustion cylinder 3
  - harmful for catalytic converter lack of combustion cylinder 4
  - Cruise control indicator lamp CRUISE
  - Cruise control indicator lamp SET
  - Lambda probe heating resistance (B1, S1)
  - Lambda probe heating resistance (B1, S2)
  - Air conditioner compressor control
  - Brake test switch
  - Oxygen sensor bank 1, sensor 1)
  - Oxygen sensor bank 2, sensor 1)
  - Cooling agent temperature voltage
  - Turbine wheel speed
  - Cruise control on/off switch
  - Engine speed actual value
  - Inlet camsh. timing control status

- Kilometer reading at MIL activation
- Gas pedal position
- Telephone antenna signal strength
- Control unit sensor voltage 4
- Engine operating mode
- Heated catalyst enabled
- Mileage since fault memory cleared
- Electric fuel pump control unit actuation
- Inlet camshaft control test (b1): result
- Exhaust camshaft adjustment test B1: Result
- Diagnostic connector VIM status
- Intake air temperature on engine start
- Time since ignition ON
- Short-term oxygen sensor control adjustment

#### B1

- Throttle valve position: closed
- Transmission oil temperature: calculated
- AC start/stop authorization
- Fan high speed
- Fan low speed
- Right overheating protection control unit
- Inlet camshaft reset valve B1
- Exhaust camshaft reset valve B1
- Battery discharge status
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Control unit sensor voltage 3
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Lambda control loop monitoring
- Injection time/cylinder 1
- Injection time/cylinder 2
- Injection time/cylinder 3
- Injection time/cylinder 4
- Var. valve timing press. switch/exh.
- Sensor reference voltage 1
- Sensor reference voltage 2
- Part load status

#### • Actuators

- Disconnection of fuel injector Cylinder 1
- Disconnection of fuel injector Cylinder 2
- Disconnection of fuel injector Cylinder 3
- Disconnection of fuel injector Cylinder 4
- Fuel pump relay
- Engine for reg. throttle valve
- Main relay
- air conditioner compressor relay
- Container valve
- Engine management system error lights
- Inlet camshaft timing control (bank 1)
- Exhaust camshaft timing control (bank 1)
- Immobilizer control lamp
- Speed control light
- Ignition coil Cylinder 1
- Ignition coil Cylinder 2
- Ignition coil Cylinder 3
- Ignition coil Cylinder 4
- Radiator fan high speed
- Radiator fan: low speed
- Oxygen sensor heating, sensor 1
- Oxygen sensor heating, sensor 2
- Variable intake system solenoid valve

Year	Engine	Liters	HP	System	Functions
2009/04 -	D6EA	3.0	239	Gear box control 6-gears automatic transmission HIVEC 5.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Neutral position initialization</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Switch idle mode</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Transmission</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Engine torque</li> <li>- Transmission selector lever position</li> <li>- Converter slip rotating speed</li> <li>- Switch magnetic valve C monitoring</li> <li>- Solenoid valve: fuel-line pressure</li> <li>- Solenoid valve: Pipe pressure, monitoring</li> <li>- Solenoid valve: Torque converter lock-up clutch</li> <li>- SV: TC lock-up clutch, monitoring</li> <li>- Fault codes count</li> <li>- Current switch magnetic valve C</li> <li>- Solenoid shift valve D current</li> <li>- Solenoid shift valve E current</li> <li>- Solenoid shift valve F current</li> <li>- Solenoid shift valve D monitoring</li> <li>- Solenoid shift valve E monitoring</li> <li>- Solenoid shift valve F monitoring</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- Solenoid valve: fuel-line pressure</li> <li>- Solenoid switch valve F</li> <li>- Torque converter clutch solenoid valve</li> </ul> </li> </ul>



[Carens - Carens 1.8i](#)  
[Carens I - Carens I 1.8 LPG](#)  
[Carens I - Carens I 2.0 LPG](#)  
[Carens II - Carens II 1.8 LPG](#)  
[Carens II - Carens II 2.0 LPG](#)  
[Carens II - Carens II 2.0 CRDi](#)  
[Carens II - Carens II 1.8i](#)  
[Carens New - Carens New 2.0 VGT CRDi](#)  
[Carens New - Carens New 2.0 LPI](#)  
[Carens \[FC\] - Carens 1.8i](#)  
[Carens \[FC\] - Carens 2.0 CRDi](#)  
[Carens \[FC\] - Carens 1.6i](#)  
[Carens \[FC\] - Carens 2.0i](#)  
[Carens \[FC\] - Carens 2.0 CRDi VGT](#)  
[Carens \[FG\] - Carens 2.0 CVVT](#)  
[Carens \[FG\] - Carens 1.6](#)  
[Carnival - Carnival 2.7 LPI](#)  
[Carnival - Carnival 2.9 VGT CRDi](#)  
[Carnival - Carnival 2.9 WGT CRDi](#)  
[Carnival \[MB\] - Carnival 2.9 CRDi](#)  
[Cee'd \[ED, FF2\] - Cee'd 1.4](#)  
[Cee'd \[ED, FF2\] - Cee'd 1.6](#)  
[Cee'd \[ED, FF2\] - Cee'd 2.0](#)  
[Cee'd \[ED, FF2\] - Cee'd 1.6 CRDi](#)  
[Cee'd \[ED, FF2\] - Cee'd 2.0 CRDi](#)  
[Cee'd \[ED, FF2\] Sporty Wagon - Cee'd 2.0 CRDi Sporty Wagon](#)  
[Cee'd \[ED, FF2\] Sporty Wagon - Cee'd 2.0 Sporty Wagon](#)  
[Cee'd \[ED, FF2\] Sporty Wagon - Cee'd 1.6 CRDi Sporty Wagon](#)  
[Cee'd \[ED, FF2\] Sporty Wagon - Cee'd 1.6 Sporty Wagon](#)  
[Cee'd \[ED, FF2\] Sporty Wagon - Cee'd 1.4 Sporty Wagon](#)  
[Cerato - Cerato 1.5 VGT CRDi](#)  
[Cerato \[FE\] - Cerato 1.6 CRDi](#)  
[Grand Carnival \[VQ\] - Grand Carnival 2.2 Diesel](#)  
[Grand Carnival \[VQ\] - Grand Carnival 2.7 LPI](#)  
[K2 - K2 1.4i](#)  
[K2 - K2 1.6i](#)  
[K5 - K5 2.0i](#)  
[K5 - K5 2.4 GDI](#)  
[K5 - K5 2.0 LPI](#)  
[K5 - K5 2.0 Turbo GDI](#)  
[Lotze - Lotze 2.0 VGT CRDi](#)  
[Lotze - Lotze 1.8i CVVT](#)  
[Lotze - Lotze 2.0i CVVT](#)  
[Lotze - Lotze 2.4i CVVT](#)  
[Lotze - Lotze 2.0 LPI](#)  
[Magentis - Magentis 2.5i](#)

[Mohave - Mohave 3.0 CRDi](#)  
[Optima \[TF\] - Optima 1.7 CRDi](#)  
[Optima \[TF\] - Optima 2.0](#)  
[Optima \[TF\] - Optima 2.4](#)  
[Pride New - Pride New 1.5 VGT CRDi](#)  
[Rondo - Rondo 2.4](#)  
[Sedona - Sedona 3.8i](#)  
[Sorento - Sorento 2.5 VGT CRDi](#)  
[Sorento - Sorento 3.8](#)  
[Sorento \[JC\] - Sorento 2.5 CRDi](#)  
[Sorento \[JC\] - Sorento 3.5i](#)  
[Sorento \[JC\] - Sorento 3.8i](#)  
[Sorento \[XM\] - Sorento 2.4](#)  
[Sorento \[XM\] - Sorento 2.4 4x4](#)  
[Spectra - Spectra 2.0i](#)  
[Spectra Hatchback - Spectra 2.0i Hatchback](#)  
[Spectra5 Hatchback - Spectra5 2.0i 16V Hatchback](#)  
[Sportage - Sportage 2.0](#)  
[Sportage - Sportage 2.0 TCI](#)  
[Sportage - Sportage 2.0i 4x4](#)  
[Sportage - Sportage 2.0 4x4](#)  
[Sportage - Sportage 2.0i](#)  
[Sportage New - Sportage New 2.0i](#)  
[Sportage New - Sportage New 2.7i](#)  
[Sportage New - Sportage New 2.7i 4x4](#)  
[Sportage New - Sportage New 2.0 VGT CRDi](#)  
[Sportage New - Sportage New 2.0 CRDi](#)  
[Sportage \[JA\] - Sportage 2.0i](#)  
[Sportage \[JE\] - Sportage 2.0i](#)  
[Sportage \[JE\] - Sportage 2.0i 4x4](#)  
[Sportage \[JE\] - Sportage 2.7i 4x4](#)  
[Sportage \[JE\] - Sportage 2.0](#)  
[Sportage \[JE\] - Sportage 2.0 4x4](#)  
[Sportage \[JE\] - Sportage 2.7](#)  
[Sportage \[JE\] - Sportage 2.7 4x4](#)  
[Sportage \[JE\] - Sportage 2.0 CRDi 4x4](#)  
[Sportage \[JE\] - Sportage 2.0 CRDi](#)

KIA					Carens - Carens 1.8i	
Year	Engine	Liters	HP	System	Functions	
2001/01 -	T8D	1.8	167	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>	

KIA					Carens I - Carens I 1.8 LPG	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> </ul> </li> </ul>	

1999/04 - 2002/01	T8D	1.8	108	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>
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KIA					
Carens I - Carens I 2.0 LPG					
Year	Engine	Liters	HP	System	Functions
1999/04 - 2002/03		2.0	123	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> </ul> </li> </ul>

- Brake tape reduction magnetic valve

KIA						Carens II - Carens II 1.8 LPG					
Year	Engine	Liters	HP	System	Functions						
2002/02 - 2006/04	T8D	1.8	108	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>						

KIA						Carens II - Carens II 2.0 LPG					
Year	Engine	Liters	HP	System	Functions						
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> </ul> </li> </ul>						

2002/02 - 2006/04		2.0	123	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul>
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KIA					
Carens II - Carens II 2.0 CRDi					
Year	Engine	Liters	HP	System	Functions
2002/02 - 2006/04		2.0	115	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> </ul>

					<ul style="list-style-type: none"> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul>
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KIA						Carens II - Carens II 1.8i
Year	Engine	Liters	HP	System	Functions	
2002/02 - 2005/09	T8D	1.8	126	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>	

KIA						Carens New - Carens New 2.0 VGT CRDi
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- kick-down switch</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> </ul> </li> </ul>	

2006/04 -	2.0	199	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> <li>- switch, brakes</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Shift release</li> <li>- Converter slip rotating speed</li> <li>- Gearshift solenoid 3</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Operating mode switch</li> <li>- Driving mode</li> <li>- Target Gear</li> <li>- Gear hold button</li> <li>- Clutch damper solenoid valve</li> <li>- AT-air control magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Gearshift solenoid 5</li> <li>- Gearshift solenoid 4</li> <li>- Pressure control solenoid 1 status</li> <li>- Pressure control solenoid 2 status</li> <li>- Pressure control solenoid 3 status</li> <li>- Pressure control solenoid 4 status</li> <li>- Pressure control solenoid 5 status</li> <li>- Syst. press. solen. valve duty cycle</li> <li>- Torque conv. lock-up clutch status</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- Press. build-up/reduc. solenoid valve</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Torque converter clutch solenoid valve</li> <li>- Gear indicator lamp D1</li> <li>- Gear indicator lamp D2</li> <li>- Gear indicator lamp D3</li> <li>- Gear indicator lamp D4</li> <li>- Gear indicator lamp D5</li> </ul> </li> </ul>
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KIA					Carens New - Carens New 2.0 LPI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> </ul>	



2006/04  
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2.0

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Gear box control  
4/5-gears automatic transmission HIVEC 5.2

• **Error memory**

• **Current values**

- Air compressor request
- Vehicle driving speed
- throttle valve position
- Switch idle mode
- kick-down switch
- Magnetic valve for reverse gear lock
- Engine revolution
- switch, brakes
- cruise control switch
- gear box oil temperature
- gears engagement control
- Solenoid valve: direct gear direct gear
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Tiptronic switch: identification
- Overdrive solenoid valve
- Gear lever position
- Gearbox input speed
- MIL-Status
- Transmission output speed
- Switch for overdrive deactivation
- Engine torque
- Gearshift solenoid 1
- Gearshift solenoid 2
- Shift release
- Converter slip rotating speed
- Gearshift solenoid 3
- Magnetic valve for crawling speed
- solenoid brake band
- Operating mode switch
- Driving mode
- Target Gear
- Gear hold button
- Clutch damper solenoid valve
- AT-air control magnetic valve
- Power supply relay gearbox
- Gearshift solenoid 5
- Gearshift solenoid 4
- Pressure control solenoid 1 status
- Pressure control solenoid 2 status
- Pressure control solenoid 3 status
- Pressure control solenoid 4 status
- Pressure control solenoid 5 status
- Syst. press. solen. valve duty cycle
- Torque conv. lock-up clutch status

• **Actuators**

- Magnetic valve for reverse gear lock
- Solenoid valve: direct gear direct gear
- Magnetic valve for crawling speed
- Press. build-up/reduc. solenoid valve
- solenoid brake band
- Magnetic valve for cruising gear
- Brake tape reduction magnetic valve
- Power supply relay gearbox
- Pressure-regulation magnetic valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Torque converter clutch solenoid valve
- Gear indicator lamp D1
- Gear indicator lamp D2
- Gear indicator lamp D3
- Gear indicator lamp D4
- Gear indicator lamp D5

Year	Engine	Liters	HP	System	Functions
1999/04 - 2002/05	TB	1.8	110	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>
2000/03 -	TB	1.8	126	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> </ul> </li> </ul>

2002/05					<ul style="list-style-type: none"> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul>
2002/09 - 2006/12	TB	1.8	126	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>

KIA					Carens [FC] - Carens 2.0 CRDi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>	

2002/04 - 2006/12	D4EA	2.0	113	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>
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KIA					
Carens [FC] - Carens 1.6i					
Year	Engine	Liters	HP	System	Functions
2002/09 - 2006/12	S6D	1.6	105	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>
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KIA					
Carens [FC] - Carens 2.0i					
Year	Engine	Liters	HP	System	Functions
				Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> </ul>

• **Current values**

- Throttle valve position (bank 2)
- Voltage, throttle valve position sensor
- Vehicle driving speed
- Coolant temperature sensor voltage
- Contact switch
- Fuel pump relay
- Coolant temperature
- Pulse-duty factor, fuel tank ventilation valve
- Input air quantity meter
- Throttle valve position sensor
- Idle regulator
- signal, throttle valve
- Engine revolution
- engine loading
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- idle signal
- intake manifold pressure
- turbo charger pressure
- Air conditioner compressor relay
- air quantity
- Clutch switch
- recommended idle revolutions
- start signal
- Immobilizer
- Fuel shut-off solenoid valve
- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3
- Injection time, cylinder 4

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2.0

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Engine control  
Theta 2.0

- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1

- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3
- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination
- Turbo charger bypass valve
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Long-term additive mixture correct.
- Long-term multiplic. mixture correc.
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position
- **Actuators**
- Fuel pump relay
- Signal lamp for representing defect, engine control
- Engine for reg. throttle valve
- Injector (cylinder 1)
- Injector (cylinder 2)
- Injector (cylinder 4)
- Injector (cylinder 4)
- solenoid A turbo pressure restriction
- fuel tank evaporation/regeneration valve
- Main relay
- air conditioner compressor relay
- Exhaust camsh.control sol. valve
- Intake camshaft control, solenoid valve
- Switchable intake manifold, solenoid valve
- Lambda probe heating (B1, S1)



					<ul style="list-style-type: none"> <li>- Lambda probe heating (B1, S2)</li> <li>- Immobilizer, warning light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Variable intake valves control</li> <li>- Fuel evaporation cut-off valve</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Camshaft adjustment solenoid valve</li> <li>- Turbo charger bypass valve</li> </ul>
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**KIA** **Carens [FC] - Carens 2.0 CRDi VGT**

Year	Engine	Liters	HP	System	Functions
2005/09 - 2006/12	D4EA	2.0	140	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>

**KIA** **Carens [FG] - Carens 2.0 CVVT**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> </ul>

- **Error memory**

- **Current values**

- Throttle valve position (bank 2)
- Voltage, throttle valve position sensor
- Vehicle driving speed
- Coolant temperature sensor voltage
- Contact switch
- Fuel pump relay
- Coolant temperature
- Pulse-duty factor, fuel tank ventilation valve
- Input air quantity meter
- Throttle valve position sensor
- Idle regulator
- signal, throttle valve
- Engine revolution
- engine loading
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- idle signal
- intake manifold pressure
- turbo charger pressure
- Air conditioner compressor relay
- air quantity
- Clutch switch
- recommended idle revolutions
- start signal
- Immobilizer
- Fuel shut-off solenoid valve
- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3

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Engine control  
Theta 2.0

- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption,

cylinder 1

- Knock detonation, offset adjustment adaption,

cylinder 2

- Knock detonation, offset adjustment adaption,

cylinder 3

- Knock detonation, offset adjustment adaption,

cylinder 4

- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination
- Turbo charger bypass valve
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Long-term additive mixture correct.
- Long-term multiplic. mixture correc.
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position

• **Actuators**

- Fuel pump relay
- Signal lamp for representing defect, engine control

control

- Engine for reg. throttle valve
- Injector (cylinder 1)
- Injector (cylinder 2)
- Injector (cylinder 4)
- Injector (cylinder 4)
- solenoid A turbo pressure restriction
- fuel tank evaporation/regeneration valve
- Main relay
- air conditioner compressor relay
- Exhaust camsh.control sol. valve
- Intake camshaft control, solenoid valve
- Switchable intake manifold, solenoid valve

					<ul style="list-style-type: none"> <li>- Lambda probe heating (B1, S1)</li> <li>- Lambda probe heating (B1, S2)</li> <li>- Immobilizer, warning light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Variable intake valves control</li> <li>- Fuel evaporation cut-off valve</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Camshaft adjustment solenoid valve</li> <li>- Turbo charger bypass valve</li> </ul>
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<b>KIA</b>	<b>Carens [FG] - Carens 1.6</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Throttle valve position (bank 2)</li> <li>- Voltage, throttle valve position sensor</li> <li>- Vehicle driving speed</li> <li>- Coolant temperature sensor voltage</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- Coolant temperature</li> <li>- Pulse-duty factor, fuel tank ventilation valve</li> <li>- Input air quantity meter</li> <li>- Throttle valve position sensor</li> <li>- Idle regulator</li> <li>- signal, throttle valve</li> <li>- Engine revolution</li> <li>- engine loading</li> <li>- stop lights switch</li> <li>- Knock control, cylinder 1</li> <li>- Knock control, cylinder 2</li> <li>- Knock control, cylinder 3</li> <li>- Knock control, cylinder 4</li> <li>- idle signal</li> <li>- intake manifold pressure</li> <li>- turbo charger pressure</li> <li>- Air conditioner compressor relay</li> <li>- air quantity</li> <li>- Clutch switch</li> <li>- recommended idle revolutions</li> <li>- start signal</li> <li>- Immobilizer</li> <li>- Fuel shut-off solenoid valve</li> <li>- fuel tank evaporation/regeneration valve</li> <li>- Servo steering wheel pressure sensor</li> <li>- system power supply</li> <li>- detonations signal</li> <li>- switch steering wheel servo</li> <li>- Main relay</li> <li>- engine oil temperature</li> <li>- Lambda compensation</li> <li>- Adaptation idle regulator</li> <li>- stop lights switch</li> <li>- Intake air temperature</li> <li>- Fan 1 control</li> <li>- Fan 2 control</li> <li>- Battery voltage activation</li> </ul> </li> </ul>

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Engine control  
Theta 2.0

- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3
- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2

- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1
- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3
- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination
- Turbo charger bypass valve
- Throttle valve sensor reference voltage

					<ul style="list-style-type: none"> <li>- Throttle valve fully closed</li> <li>- Long-term additive mixture correct.</li> <li>- Long-term multiplic. mixture correc.</li> <li>- Battery charge/discharge current</li> <li>- Battery current sensor voltage</li> <li>- Exhaust camshaft control position</li> <li>- Inlet camshaft control position</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Signal lamp for representing defect, engine control</li> <li>- Engine for reg. throttle valve</li> <li>- Injector (cylinder 1)</li> <li>- Injector (cylinder 2)</li> <li>- Injector (cylinder 4)</li> <li>- Injector (cylinder 4)</li> <li>- solenoid A turbo pressure restriction</li> <li>- fuel tank evaporation/regeneration valve</li> <li>- Main relay</li> <li>- air conditioner compressor relay</li> <li>- Exhaust camsh.control sol. valve</li> <li>- Intake camshaft control, solenoid valve</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Lambda probe heating (B1, S1)</li> <li>- Lambda probe heating (B1, S2)</li> <li>- Immobilizer, warning light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Variable intake valves control</li> <li>- Fuel evaporation cut-off valve</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Camshaft adjustment solenoid valve</li> <li>- Turbo charger bypass valve</li> </ul> </li> </ul>
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KIA					Carnival - Carnival 2.7 LPI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- kick-down switch</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> </ul> </li> </ul>	



2006/10	K5M	2.7	161	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> <li>- Switch for overdrive deactivation</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Shift release</li> <li>- Converter slip rotating speed</li> <li>- Gearshift solenoid 3</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Operating mode switch</li> <li>- Driving mode</li> <li>- Target Gear</li> <li>- Gear hold button</li> <li>- Clutch damper solenoid valve</li> <li>- AT-air control magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Gearshift solenoid 5</li> <li>- Gearshift solenoid 4</li> <li>- Pressure control solenoid 1 status</li> <li>- Pressure control solenoid 2 status</li> <li>- Pressure control solenoid 3 status</li> <li>- Pressure control solenoid 4 status</li> <li>- Pressure control solenoid 5 status</li> <li>- Syst. press. solen. valve duty cycle</li> <li>- Torque conv. lock-up clutch status</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- Press. build-up/reduc. solenoid valve</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Torque converter clutch solenoid valve</li> <li>- Gear indicator lamp D1</li> <li>- Gear indicator lamp D2</li> <li>- Gear indicator lamp D3</li> <li>- Gear indicator lamp D4</li> <li>- Gear indicator lamp D5</li> </ul>
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KIA Carnival - Carnival 2.9 VGT CRDi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- kick-down switch</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> </ul> </li> </ul>

2007/11 -	J3	2.9	192	<p>Gear box control 4/5-gears automatic transmission HIVEC 5.2</p>	<ul style="list-style-type: none"> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Shift release</li> <li>- Converter slip rotating speed</li> <li>- Gearshift solenoid 3</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Operating mode switch</li> <li>- Driving mode</li> <li>- Target Gear</li> <li>- Gear hold button</li> <li>- Clutch damper solenoid valve</li> <li>- AT-air control magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Gearshift solenoid 5</li> <li>- Gearshift solenoid 4</li> <li>- Pressure control solenoid 1 status</li> <li>- Pressure control solenoid 2 status</li> <li>- Pressure control solenoid 3 status</li> <li>- Pressure control solenoid 4 status</li> <li>- Pressure control solenoid 5 status</li> <li>- Syst. press. solen. valve duty cycle</li> <li>- Torque conv. lock-up clutch status</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- Press. build-up/reduc. solenoid valve</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Torque converter clutch solenoid valve</li> <li>- Gear indicator lamp D1</li> <li>- Gear indicator lamp D2</li> <li>- Gear indicator lamp D3</li> <li>- Gear indicator lamp D4</li> <li>- Gear indicator lamp D5</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Neutral position initialization</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Switch idle mode</li> <li>- Engine revolution</li> <li>- switch, brakes</li> </ul> </li> </ul>

Gear box control  
6-gears automatic transmission HIVEC 5.3

- gear box oil temperature
- transmission ratio
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Tiptronic switch: identification
- Transmission
- Gearbox input speed
- Transmission output speed
- Automatic transmission power supply
- Engine torque
- Transmission selector lever position
- Converter slip rotating speed
- Switch magnetic valve C monitoring
- Solenoid valve: fuel-line pressure
- Solenoid valve: Pipe pressure, monitoring
- Solenoid valve: Torque converter lock-up clutch
- SV: TC lock-up clutch, monitoring
- Fault codes count
- Current switch magnetic valve C
- Solenoid shift valve D current
- Solenoid shift valve E current
- Solenoid shift valve F current
- Solenoid shift valve D monitoring
- Solenoid shift valve E monitoring
- Solenoid shift valve F monitoring
- **Actuators**
  - Solenoid switch valve A
  - Solenoid switch valve B
  - Solenoid switch valve C
  - Solenoid switch valve D
  - Solenoid switch valve E
  - Solenoid valve: fuel-line pressure
  - Solenoid switch valve F
  - Torque converter clutch solenoid valve

Gear box control  
5-gears automatic transmission HIVEC 4.2

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
- **Error memory**
- **Current values**
  - Air compressor request
  - Vehicle driving speed
  - Solenoid valve 1/reverse-gear locking
  - Engine revolution
  - gear box oil temperature
  - gears engagement control
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Tiptronic switch: identification
  - Overdrive solenoid valve
  - Electronic control unit supply voltage
  - Gear lever position
  - Gearbox input speed
  - Transmission output speed
  - Engine torque
  - Converter slip rotating speed
  - Magnetic valve for crawling speed
  - Shut-off solenoid valve 2/4
  - Brake tape reduction magnetic valve
  - Pressure-regulation magnetic valve 1
- **Actuators**
  - Solenoid valve 1/reverse-gear locking
  - Solenoid valve: direct gear direct gear
  - Selector lever position indication: 5
  - Selector lever position indication: 4
  - Selector lever position indication: 3

					<ul style="list-style-type: none"> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Shut-off solenoid valve 2/4</li> </ul>
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**KIA Carnival - Carnival 2.9 WGT CRDi**

Year	Engine	Liters	HP	System	Functions
				Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- kick-down switch</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Shift release</li> <li>- Converter slip rotating speed</li> <li>- Gearshift solenoid 3</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Operating mode switch</li> <li>- Driving mode</li> <li>- Target Gear</li> <li>- Gear hold button</li> <li>- Clutch damper solenoid valve</li> <li>- AT-air control magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Gearshift solenoid 5</li> <li>- Gearshift solenoid 4</li> <li>- Pressure control solenoid 1 status</li> <li>- Pressure control solenoid 2 status</li> <li>- Pressure control solenoid 3 status</li> <li>- Pressure control solenoid 4 status</li> <li>- Pressure control solenoid 5 status</li> <li>- Syst. press. solen. valve duty cycle</li> <li>- Torque conv. lock-up clutch status</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> </ul> </li> </ul>

2005/07 - 2007/10	J3	2.9	170		<ul style="list-style-type: none"> <li>- Magnetic valve for crawling speed</li> <li>- Press. build-up/reduc. solenoid valve</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Torque converter clutch solenoid valve</li> <li>- Gear indicator lamp D1</li> <li>- Gear indicator lamp D2</li> <li>- Gear indicator lamp D3</li> <li>- Gear indicator lamp D4</li> <li>- Gear indicator lamp D5</li> </ul>
Gear box control 5-gears automatic transmission HIVEC 4.2					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Engine revolution</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Electronic control unit supply voltage</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- Shut-off solenoid valve 2/4</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Shut-off solenoid valve 2/4</li> </ul> </li> </ul>

KIA Carnival [MB] - Carnival 2.9 CRDi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> </ul>

2006/04 -	J3	2.9	185	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- kick-down switch</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Shift release</li> <li>- Converter slip rotating speed</li> <li>- Gearshift solenoid 3</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Operating mode switch</li> <li>- Driving mode</li> <li>- Target Gear</li> <li>- Gear hold button</li> <li>- Clutch damper solenoid valve</li> <li>- AT-air control magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Gearshift solenoid 5</li> <li>- Gearshift solenoid 4</li> <li>- Pressure control solenoid 1 status</li> <li>- Pressure control solenoid 2 status</li> <li>- Pressure control solenoid 3 status</li> <li>- Pressure control solenoid 4 status</li> <li>- Pressure control solenoid 5 status</li> <li>- Syst. press. solen. valve duty cycle</li> <li>- Torque conv. lock-up clutch status</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- Press. build-up/reduc. solenoid valve</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Torque converter clutch solenoid valve</li> <li>- Gear indicator lamp D1</li> <li>- Gear indicator lamp D2</li> <li>- Gear indicator lamp D3</li> <li>- Gear indicator lamp D4</li> <li>- Gear indicator lamp D5</li> </ul> </li> </ul>
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Year	Engine	Liters	HP	System	Functions
2006/11 - 2009/08	G4FA	1.4	109	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> </ul>

2009/09 -	G4FA	1.4	90	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> </ul> </li> </ul>



2011/01 -	G4FA	1.4	105	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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KIA						Cee'd [ED, FF2] - Cee'd 1.6					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> </ul> </li> </ul>					

2006/11 - 2008/01	G4FC	1.6	122	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Convertor slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
2008/02	G4FC	1.6	125 -	Gear box control	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Convertor slip rotating speed</li> </ul> </li> </ul>

-			126	4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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KIA					
Cee'd [ED, FF2] - Cee'd 2.0					
Year	Engine	Liters	HP	System	Functions
2006/11 -	G4GC	2.0	143	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Convertor slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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KIA					
Cee'd [ED, FF2] - Cee'd 1.6 CRDi					
Year	Engine	Liters	HP	System	Functions
2006/11 -	D4FB-L	1.6	90	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>

					<ul style="list-style-type: none"> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
2010/09 -	D4FB	1.6	128	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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KIA Cee'd [ED, FF2] - Cee'd 2.0 CRDi					
Year	Engine	Liters	HP	System	Functions
2007/09 -	D4EA-F	2.0	140	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> </ul> </li> </ul>

- Pressure-regulation magnetic valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3

KIA Cee'd [ED, FF2] Sporty Wagon - Cee'd 2.0 CRDi Sporty Wagon					
Year	Engine	Liters	HP	System	Functions
2007/09 -	D4EA-F	2.0	140	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>

KIA Cee'd [ED, FF2] Sporty Wagon - Cee'd 2.0 Sporty Wagon					
Year	Engine	Liters	HP	System	Functions
2007/09 -	G4GC	2.0	143	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>

KIA Cee'd [ED, FF2] Sporty Wagon - Cee'd 1.6 CRDi Sporty Wagon					
Year	Engine	Liters	HP	System	Functions



2007/09 -	D4FB-L	1.6	90	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> </ul> </li> </ul>

2010/09 -	D4FB	1.6	128	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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KIA Cee'd [ED, FF2] Sporty Wagon - Cee'd 1.6 Sporty Wagon					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> </ul> </li> </ul>

2007/09 -	G4FC	1.6	122 - 126	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Convertor slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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KIA Cee'd [ED, FF2] Sporty Wagon - Cee'd 1.4 Sporty Wagon					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> </ul> </li> </ul>

2007/09 - 2009/08	G4FA	1.4	109	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Convertor slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
2009/09	G4FA	1.4	90	Gear box control	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Convertor slip rotating speed</li> </ul> </li> </ul>

				4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
2011/01 -	G4FA	1.4	105	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> </ul>

					<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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KIA Cerato - Cerato 1.5 VGT CRDi					
Year	Engine	Liters	HP	System	Functions
2005/06 -		1.5	104	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Convertor slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> </ul>

					<ul style="list-style-type: none"> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
2006/01 -		1.5	141	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Convertor slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> </ul> </li> </ul>

- Pressure-regulation magnetic valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3

KIA					Cerato [FE] - Cerato 1.6 CRDi	
Year	Engine	Liters	HP	System	Functions	
2005/06 - 2009/11	D4FB	1.6	116	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>	



Year	Engine	Liters	HP	System	Functions
2010/01 -	R 2.2	2.2	197	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- kick-down switch</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Shift release</li> <li>- Convertor slip rotating speed</li> <li>- Gearshift solenoid 3</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Operating mode switch</li> <li>- Driving mode</li> <li>- Target Gear</li> <li>- Gear hold button</li> <li>- Clutch damper solenoid valve</li> <li>- AT-air control magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Gearshift solenoid 5</li> <li>- Gearshift solenoid 4</li> <li>- Pressure control solenoid 1 status</li> <li>- Pressure control solenoid 2 status</li> <li>- Pressure control solenoid 3 status</li> <li>- Pressure control solenoid 4 status</li> <li>- Pressure control solenoid 5 status</li> <li>- Syst. press. solen. valve duty cycle</li> <li>- Torque conv. lock-up clutch status</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- Press. build-up/reduc. solenoid valve</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Torque converter clutch solenoid valve</li> <li>- Gear indicator lamp D1</li> <li>- Gear indicator lamp D2</li> <li>- Gear indicator lamp D3</li> <li>- Gear indicator lamp D4</li> <li>- Gear indicator lamp D5</li> </ul>
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**KIA Grand Carnival [VQ] - Grand Carnival 2.7 LPI**

Year	Engine	Liters	HP	System	Functions
2007/01 -	Mu 2.7 LPI	2.7	160	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- kick-down switch</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Shift release</li> <li>- Convertor slip rotating speed</li> <li>- Gearshift solenoid 3</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Operating mode switch</li> <li>- Driving mode</li> <li>- Target Gear</li> <li>- Gear hold button</li> <li>- Clutch damper solenoid valve</li> <li>- AT-air control magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Gearshift solenoid 5</li> <li>- Gearshift solenoid 4</li> <li>- Pressure control solenoid 1 status</li> <li>- Pressure control solenoid 2 status</li> <li>- Pressure control solenoid 3 status</li> <li>- Pressure control solenoid 4 status</li> <li>- Pressure control solenoid 5 status</li> <li>- Syst. press. solen. valve duty cycle</li> <li>- Torque conv. lock-up clutch status</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- Press. build-up/reduc. solenoid valve</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Torque converter clutch solenoid valve</li> <li>- Gear indicator lamp D1</li> <li>- Gear indicator lamp D2</li> <li>- Gear indicator lamp D3</li> <li>- Gear indicator lamp D4</li> <li>- Gear indicator lamp D5</li> </ul>
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KIA					
K2 - K2 1.4i					
Year	Engine	Liters	HP	System	Functions
2011/07 -	G4FA	1.4	107	Gear box control 6-gears automatic transmission HIVEC 5.7	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- solenoid valve, converter clutch</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- Oil temperature sensor gear box</li> <li>- Inserted gear</li> <li>- throttle valve angle</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Sport switch</li> <li>- Engine torque</li> <li>- Automatic pressure control solenoid A</li> <li>- Sportronic switch upshift</li> <li>- Sportronic switch downshift</li> <li>- Torque converter-slip speed</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Transmission control fault lamp</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> <li>- Solenoid shift valve E</li> <li>- Solenoid shift valve F (A)</li> </ul> </li> </ul>

KIA					K2 - K2 1.6i	
Year	Engine	Liters	HP	System	Functions	
2011/08 -	G4FC	1.6	123	Gear box control 6-gears automatic transmission HIVEC 5.7	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- solenoid valve, converter clutch</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- Oil temperature sensor gear box</li> <li>- Inserted gear</li> <li>- throttle valve angle</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Sport switch</li> <li>- Engine torque</li> <li>- Automatic pressure control solenoid A</li> <li>- Sportronic switch upshift</li> <li>- Sportronic switch downshift</li> <li>- Torque converter-slip speed</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Transmission control fault lamp</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> <li>- Solenoid shift valve E</li> <li>- Solenoid shift valve F (A)</li> </ul> </li> </ul>	

KIA					K5 - K5 2.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- solenoid valve, converter clutch</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- Oil temperature sensor gear box</li> <li>- Inserted gear</li> <li>- throttle valve angle</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> </ul> </li> </ul>	

Gear box control  
6-gears automatic transmission HIVEC 5.7

- Solenoid switch valve E
- transmission ratio
- Acceleration pedal position sensor
- Current gear
- Gearbox input speed
- Transmission output speed
- Sport switch
- Engine torque
- Automatic pressure control solenoid A
- Sportronic switch upshift
- Sportronic switch downshift
- Torque converter-slip speed
- Torque converter clutch status
- Solenoid switch valve F
- Transmission control fault lamp

• **Actuators**

- Pressure-regulation magnetic valve
- Torque converter clutch solenoid valve
- Solenoid shift valve A
- Solenoid shift valve B
- Solenoid shift valve C
- Solenoid shift valve D
- Solenoid shift valve E
- Solenoid shift valve F (A)

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Control unit reset

• **Error memory**

• **Current values**

- Air compressor pressure signal
- Air compressor request
- Power supply
- Vehicle driving speed
- Oxygen sensor, bank 1
- Coolant temperature
- Battery voltage
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- fuel correction (bank 1)
- Knock sensor 1 (bank 1)
- switch steering wheel servo
- Main relay
- Throttle valve angle, potentiometer path 1
- Throttle valve angle, potentiometer path 2
- Intake air temperature
- Throttle valve signal
- Ignition
- Battery voltage activation
- Throttle valve position sensor 1
- Throttle valve position sensor 2
- Oxygen sensor bank 1, sensor 1)
- Oxygen sensor (bank 1, sensor 2)
- Pulse-duty factor, exhausted gases valve

actuator

- Wiper switch
- Headlights
- Engine operation detected
- Clutch pedal switch
- intake manifold pressure sensor
- Pulse duty factor, intake manifold valve
- Ambient pressure
- MIL-Status

2010/05  
-

Theta II 2.0  
MPI

2.0

165

Engine control  
Theta 2.2

- Switch identification
  - Throttle valves servo motor control
  - Idle running speed target value
  - Gas pedal position sensor 1 Voltage
  - Gas pedal position sensor 2 Voltage
  - Ignition angle Cylinder 1
  - Ignition angle Cylinder 2
  - Ignition angle Cylinder 3
  - Ignition angle Cylinder 4
  - Fuel evaporation control valve, spray rate
  - Short-term mix. correction B1 (OBD)
  - Lambda target value
  - Lambda actual value
  - Air conditioner pressure sensor voltage
  - harmful for catalytic converter lack of combustion cylinder 1
  - harmful for catalytic converter lack of combustion cylinder 2
  - harmful for catalytic converter lack of combustion cylinder 3
  - harmful for catalytic converter lack of combustion cylinder 4
  - Cruise control indicator lamp CRUISE
  - Cruise control indicator lamp SET
  - Battery charging status
  - Lambda probe heating resistance (B1, S1)
  - Lambda probe heating resistance (B1, S2)
  - Air conditioner compressor control
  - Brake test switch
  - Oxygen sensor bank 1, sensor 1)
  - Oxygen sensor bank 2, sensor 1)
  - Cooling agent temperature voltage
  - Turbine wheel speed
  - Cruise control switch status
  - Cruise control on/off switch
  - Engine speed actual value
  - Inlet camsh. timing control status
  - Kilometer reading at MIL activation
  - Gas pedal position
  - Cylinder 1 knock sensor ZW correction
  - Cylinder 2 knock sensor ZW correction
  - Cylinder 3 knock sensor ZW correction
  - Cylinder 4 knock sensor ZW correction
  - Telephone antenna signal strength
  - Cruise control switch signal voltage
  - Control unit sensor voltage 4
  - Engine operating mode
  - Generator charge signal
  - Heated catalyst enabled
  - Mileage since fault memory cleared
  - Electric fuel pump control unit actuation
  - Battery state
  - Inlet camshaft control test (b1): result
  - Exhaust camshaft adjustment test B1: Result
  - Diagnostic connector VIM status
  - Intake air temperature on engine start
  - Time since ignition ON
  - Exhaust system injection PWM signal
  - Short-term oxygen sensor control adjustment
- B1
- Throttle valve position: closed
  - Alternator load signal filtered raw value
  - Transmission oil temperature: calculated
  - AC start/stop authorization
  - Fan high speed
  - Fan low speed
  - Right overheating protection control unit
  - Inlet camshaft reset valve B1

				<ul style="list-style-type: none"> <li>- Exhaust camshaft reset valve B1</li> <li>- Battery temperature</li> <li>- Battery capacity</li> <li>- Battery discharge status</li> <li>- Intake air temperature sensor voltage</li> <li>- Throttle valve position: Full load</li> <li>- PWM Generator</li> <li>- Camshaft / Crankshaft synchronization</li> <li>- Missfire detection counter Cylinder 1</li> <li>- Missfire detection counter Cylinder 2</li> <li>- Missfire detection counter Cylinder 3</li> <li>- Missfire detection counter Cylinder 4</li> <li>- Control unit sensor voltage 3</li> <li>- Voltage intake air pressure sensor</li> <li>- Coolant temp. at engine start</li> <li>- Lambda control loop monitoring</li> <li>- Fresh air blower, maximum speed</li> <li>- Battery charge/discharge current</li> <li>- Injection time/cylinder 1</li> <li>- Injection time/cylinder 2</li> <li>- Injection time/cylinder 3</li> <li>- Injection time/cylinder 4</li> <li>- Var. valve timing press. switch/exh.</li> <li>- Sensor reference voltage 1</li> <li>- Sensor reference voltage 2</li> <li>- Part load status</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Disconnection of fuel injector Cylinder 1</li> <li>- Disconnection of fuel injector Cylinder 2</li> <li>- Disconnection of fuel injector Cylinder 3</li> <li>- Disconnection of fuel injector Cylinder 4</li> <li>- Fuel pump relay</li> <li>- Engine for reg. throttle valve</li> <li>- Main relay</li> <li>- air conditioner compressor relay</li> <li>- Container valve</li> <li>- Engine management system error lights</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Exhaust camshaft timing control (bank 1)</li> <li>- Immobilizer control lamp</li> <li>- Speed control light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Oxygen sensor heating, sensor 1</li> <li>- Oxygen sensor heating, sensor 2</li> <li>- Variable intake system solenoid valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- solenoid valve, converter clutch</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- Oil temperature sensor gear box</li> <li>- Inserted gear</li> <li>- throttle valve angle</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> </ul> </li> </ul>

Gear box control  
6-gears automatic transmission HIVEC 5.7

- Solenoid switch valve E
- transmission ratio
- Acceleration pedal position sensor
- Current gear
- Gearbox input speed
- Transmission output speed
- Sport switch
- Engine torque
- Automatic pressure control solenoid A
- Sportronic switch upshift
- Sportronic switch downshift
- Torque converter-slip speed
- Torque converter clutch status
- Solenoid switch valve F
- Transmission control fault lamp

• **Actuators**

- Pressure-regulation magnetic valve
- Torque converter clutch solenoid valve
- Solenoid shift valve A
- Solenoid shift valve B
- Solenoid shift valve C
- Solenoid shift valve D
- Solenoid shift valve E
- Solenoid shift valve F (A)

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Control unit reset

• **Error memory**

• **Current values**

- Air compressor pressure signal
- Air compressor request
- Power supply
- Vehicle driving speed
- Oxygen sensor, bank 1
- Coolant temperature
- Battery voltage
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- fuel correction (bank 1)
- Knock sensor 1 (bank 1)
- switch steering wheel servo
- Main relay
- Throttle valve angle, potentiometer path 1
- Throttle valve angle, potentiometer path 2
- Intake air temperature
- Throttle valve signal
- Ignition
- Battery voltage activation
- Throttle valve position sensor 1
- Throttle valve position sensor 2
- Oxygen sensor bank 1, sensor 1)
- Oxygen sensor (bank 1, sensor 2)
- Pulse-duty factor, exhausted gases valve

actuator

- Wiper switch
- Headlights
- Engine operation detected
- Clutch pedal switch
- intake manifold pressure sensor
- Pulse duty factor, intake manifold valve
- Ambient pressure
- MIL-Status



2011/03

G4KD

2.0

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Engine control  
Theta 2.2

- Switch identification
  - Throttle valves servo motor control
  - Idle running speed target value
  - Gas pedal position sensor 1 Voltage
  - Gas pedal position sensor 2 Voltage
  - Ignition angle Cylinder 1
  - Ignition angle Cylinder 2
  - Ignition angle Cylinder 3
  - Ignition angle Cylinder 4
  - Fuel evaporation control valve, spray rate
  - Short-term mix. correction B1 (OBD)
  - Lambda target value
  - Lambda actual value
  - Air conditioner pressure sensor voltage
  - harmful for catalytic converter lack of combustion cylinder 1
  - harmful for catalytic converter lack of combustion cylinder 2
  - harmful for catalytic converter lack of combustion cylinder 3
  - harmful for catalytic converter lack of combustion cylinder 4
  - Cruise control indicator lamp CRUISE
  - Cruise control indicator lamp SET
  - Battery charging status
  - Lambda probe heating resistance (B1, S1)
  - Lambda probe heating resistance (B1, S2)
  - Air conditioner compressor control
  - Brake test switch
  - Oxygen sensor bank 1, sensor 1)
  - Oxygen sensor bank 2, sensor 1)
  - Cooling agent temperature voltage
  - Turbine wheel speed
  - Cruise control switch status
  - Cruise control on/off switch
  - Engine speed actual value
  - Inlet camsh. timing control status
  - Kilometer reading at MIL activation
  - Gas pedal position
  - Cylinder 1 knock sensor ZW correction
  - Cylinder 2 knock sensor ZW correction
  - Cylinder 3 knock sensor ZW correction
  - Cylinder 4 knock sensor ZW correction
  - Telephone antenna signal strength
  - Cruise control switch signal voltage
  - Control unit sensor voltage 4
  - Engine operating mode
  - Generator charge signal
  - Heated catalyst enabled
  - Mileage since fault memory cleared
  - Electric fuel pump control unit actuation
  - Battery state
  - Inlet camshaft control test (b1): result
  - Exhaust camshaft adjustment test B1: Result
  - Diagnostic connector VIM status
  - Intake air temperature on engine start
  - Time since ignition ON
  - Exhaust system injection PWM signal
  - Short-term oxygen sensor control adjustment
- B1
- Throttle valve position: closed
  - Alternator load signal filtered raw value
  - Transmission oil temperature: calculated
  - AC start/stop authorization
  - Fan high speed
  - Fan low speed
  - Right overheating protection control unit
  - Inlet camshaft reset valve B1

					<ul style="list-style-type: none"> <li>- Exhaust camshaft reset valve B1</li> <li>- Battery temperature</li> <li>- Battery capacity</li> <li>- Battery discharge status</li> <li>- Intake air temperature sensor voltage</li> <li>- Throttle valve position: Full load</li> <li>- PWM Generator</li> <li>- Camshaft / Crankshaft synchronization</li> <li>- Missfire detection counter Cylinder 1</li> <li>- Missfire detection counter Cylinder 2</li> <li>- Missfire detection counter Cylinder 3</li> <li>- Missfire detection counter Cylinder 4</li> <li>- Control unit sensor voltage 3</li> <li>- Voltage intake air pressure sensor</li> <li>- Coolant temp. at engine start</li> <li>- Lambda control loop monitoring</li> <li>- Fresh air blower, maximum speed</li> <li>- Battery charge/discharge current</li> <li>- Injection time/cylinder 1</li> <li>- Injection time/cylinder 2</li> <li>- Injection time/cylinder 3</li> <li>- Injection time/cylinder 4</li> <li>- Var. valve timing press. switch/exh.</li> <li>- Sensor reference voltage 1</li> <li>- Sensor reference voltage 2</li> <li>- Part load status</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Disconnection of fuel injector Cylinder 1</li> <li>- Disconnection of fuel injector Cylinder 2</li> <li>- Disconnection of fuel injector Cylinder 3</li> <li>- Disconnection of fuel injector Cylinder 4</li> <li>- Fuel pump relay</li> <li>- Engine for reg. throttle valve</li> <li>- Main relay</li> <li>- air conditioner compressor relay</li> <li>- Container valve</li> <li>- Engine management system error lights</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Exhaust camshaft timing control (bank 1)</li> <li>- Immobilizer control lamp</li> <li>- Speed control light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Oxygen sensor heating, sensor 1</li> <li>- Oxygen sensor heating, sensor 2</li> <li>- Variable intake system solenoid valve</li> </ul>
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KIA					K5 - K5 2.4 GDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- solenoid valve, converter clutch</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- Oil temperature sensor gear box</li> </ul> </li> </ul>	

2010/05 -	Theta II 2.4 GDI	2.4	201	Gear box control 6-gears automatic transmission HIVEC 5.7	<ul style="list-style-type: none"> <li>- Inserted gear</li> <li>- throttle valve angle</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Sport switch</li> <li>- Engine torque</li> <li>- Automatic pressure control solenoid A</li> <li>- Sportronic switch upshift</li> <li>- Sportronic switch downshift</li> <li>- Torque converter-slip speed</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Transmission control fault lamp</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> <li>- Solenoid shift valve E</li> <li>- Solenoid shift valve F (A)</li> </ul> </li> </ul>
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KIA K5 - K5 2.0 LPI					
Year	Engine	Liters	HP	System	Functions
2010/05 -	Theta II 2.0 LPI	2.0	144	Gear box control 6-gears automatic transmission HIVEC 5.7	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- solenoid valve, converter clutch</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- Oil temperature sensor gear box</li> <li>- Inserted gear</li> <li>- throttle valve angle</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Sport switch</li> <li>- Engine torque</li> <li>- Automatic pressure control solenoid A</li> <li>- Sportronic switch upshift</li> <li>- Sportronic switch downshift</li> <li>- Torque converter-slip speed</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Transmission control fault lamp</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Pressure-regulation magnetic valve</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> <li>- Solenoid shift valve E</li> <li>- Solenoid shift valve F (A)</li> </ul>
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KIA					
K5 - K5 2.0 Turbo GDI					
Year	Engine	Liters	HP	System	Functions
2011/07 -	Theta II 2.0 GDI	2.0	271	Gear box control 6-gears automatic transmission HIVEC 5.7	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- solenoid valve, converter clutch</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- Oil temperature sensor gear box</li> <li>- Inserted gear</li> <li>- throttle valve angle</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Sport switch</li> <li>- Engine torque</li> <li>- Automatic pressure control solenoid A</li> <li>- Sportronic switch upshift</li> <li>- Sportronic switch downshift</li> <li>- Torque converter-slip speed</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Transmission control fault lamp</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> <li>- Solenoid shift valve E</li> <li>- Solenoid shift valve F (A)</li> </ul> </li> </ul>

KIA					
Lotze - Lotze 2.0 VGT CRDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

2006/05 -	2.0	194	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- kick-down switch</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Shift release</li> <li>- Converter slip rotating speed</li> <li>- Gearshift solenoid 3</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Operating mode switch</li> <li>- Driving mode</li> <li>- Target Gear</li> <li>- Gear hold button</li> <li>- Clutch damper solenoid valve</li> <li>- AT-air control magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Gearshift solenoid 5</li> <li>- Gearshift solenoid 4</li> <li>- Pressure control solenoid 1 status</li> <li>- Pressure control solenoid 2 status</li> <li>- Pressure control solenoid 3 status</li> <li>- Pressure control solenoid 4 status</li> <li>- Pressure control solenoid 5 status</li> <li>- Syst. press. solen. valve duty cycle</li> <li>- Torque conv. lock-up clutch status</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- Press. build-up/reduc. solenoid valve</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Torque converter clutch solenoid valve</li> <li>- Gear indicator lamp D1</li> <li>- Gear indicator lamp D2</li> <li>- Gear indicator lamp D3</li> <li>- Gear indicator lamp D4</li> <li>- Gear indicator lamp D5</li> </ul>
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KIA Lotze - Lotze 1.8i CVVT					
Year	Engine	Liters	HP	System	Functions
2005/08 -		1.8	133	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>

KIA Lotze - Lotze 2.0i CVVT					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> </ul> </li> </ul>

2005/08 -	2.0	144	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>
			Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> </ul>

- **Error memory**

- **Current values**

- Throttle valve position (bank 2)
- Voltage, throttle valve position sensor
- Vehicle driving speed
- Coolant temperature sensor voltage
- Contact switch
- Fuel pump relay
- Coolant temperature
- Pulse-duty factor, fuel tank ventilation valve
- Input air quantity meter
- Throttle valve position sensor
- Idle regulator
- signal, throttle valve
- Engine revolution
- engine loading
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- idle signal
- intake manifold pressure
- turbo charger pressure
- Air conditioner compressor relay
- air quantity
- Clutch switch
- recommended idle revolutions
- start signal
- Immobilizer
- Fuel shut-off solenoid valve
- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3



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I4 Theta II  
CVVT

2.0

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Engine control  
Theta 2.0

- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption,

cylinder 1

- Knock detonation, offset adjustment adaption,

cylinder 2

- Knock detonation, offset adjustment adaption,

cylinder 3

- Knock detonation, offset adjustment adaption,

cylinder 4

- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination
- Turbo charger bypass valve
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Long-term additive mixture correct.
- Long-term multiplic. mixture correc.
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position

• **Actuators**

- Fuel pump relay
- Signal lamp for representing defect, engine

control

- Engine for reg. throttle valve
- Injector (cylinder 1)
- Injector (cylinder 2)
- Injector (cylinder 4)
- Injector (cylinder 4)
- solenoid A turbo pressure restriction
- fuel tank evaporation/regeneration valve
- Main relay
- air conditioner compressor relay
- Exhaust camsh.control sol. valve
- Intake camshaft control, solenoid valve
- Switchable intake manifold, solenoid valve

					<ul style="list-style-type: none"> <li>- Lambda probe heating (B1, S1)</li> <li>- Lambda probe heating (B1, S2)</li> <li>- Immobilizer, warning light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Variable intake valves control</li> <li>- Fuel evaporation cut-off valve</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Camshaft adjustment solenoid valve</li> <li>- Turbo charger bypass valve</li> </ul>
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<b>KIA</b>	<b>Lotze - Lotze 2.4i CVT</b>
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Year	Engine	Liters	HP	System	Functions
2005/08 -		2.4	166	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> </ul> </li> </ul>

Gear box control  
HIVEC 2.1

- Switch idle mode
- Magnetic valve for reverse gear lock
- Engine revolution
- switch, brakes
- engine torque
- cruise control switch
- gear box oil temperature
- gears engagement control
- Solenoid valve: direct gear direct gear
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Tiptronic switch: identification
- Overdrive solenoid valve
- Gear lever position
- Gearbox input speed
- Transmission output speed
- Automatic transmission power supply
- Convertor slip rotating speed
- Magnetic valve for crawling speed
- solenoid brake band
- Mode switch Hold
- AT-air control magnetic valve
- Brake tape reduction magnetic valve
- **Actuators**
  - Magnetic valve for reverse gear lock
  - Solenoid valve: direct gear direct gear
  - Magnetic valve for crawling speed
  - solenoid brake band
  - Magnetic valve for cruising gear
  - Power supply relay
  - Brake tape reduction magnetic valve

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
- **Error memory**
- **Current values**
  - Throttle valve position (bank 2)
  - Voltage, throttle valve position sensor
  - Vehicle driving speed
  - Coolant temperature sensor voltage
  - Contact switch
  - Fuel pump relay
  - Coolant temperature
  - Pulse-duty factor, fuel tank ventilation valve
  - Input air quantity meter
  - Throttle valve position sensor
  - Idle regulator
  - signal, throttle valve
  - Engine revolution
  - engine loading
  - stop lights switch
  - Knock control, cylinder 1
  - Knock control, cylinder 2
  - Knock control, cylinder 3
  - Knock control, cylinder 4
  - idle signal
  - intake manifold pressure
  - turbo charger pressure
  - Air conditioner compressor relay
  - air quantity
  - Clutch switch
  - recommended idle revolutions
  - start signal
  - Immobilizer
  - Fuel shut-off solenoid valve
  - fuel tank evaporation/regeneration valve

2008/06  
-

I4 Theta II  
CVVT

2.4

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- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3
- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch

Engine control  
Theta 2.0

- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1
- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3
- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization

					<ul style="list-style-type: none"> <li>- Missfire detection counter Cylinder 1</li> <li>- Missfire detection counter Cylinder 2</li> <li>- Missfire detection counter Cylinder 3</li> <li>- Missfire detection counter Cylinder 4</li> <li>- Inlet camshaft timing control, duty cycle</li> <li>- Exhaust camshaft timing control, duty cycle</li> <li>- Fuel level sensor</li> <li>- Intake air pressure</li> <li>- Voltage intake air pressure sensor</li> <li>- Coolant temp. at engine start</li> <li>- Camshaft adjustment key combination</li> <li>- Turbo charger bypass valve</li> <li>- Throttle valve sensor reference voltage</li> <li>- Throttle valve fully closed</li> <li>- Long-term additive mixture correct.</li> <li>- Long-term multiplic. mixture correc.</li> <li>- Battery charge/discharge current</li> <li>- Battery current sensor voltage</li> <li>- Exhaust camshaft control position</li> <li>- Inlet camshaft control position</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Signal lamp for representing defect, engine control</li> <li>- Engine for reg. throttle valve</li> <li>- Injector (cylinder 1)</li> <li>- Injector (cylinder 2)</li> <li>- Injector (cylinder 4)</li> <li>- Injector (cylinder 4)</li> <li>- solenoid A turbo pressure restriction</li> <li>- fuel tank evaporation/regeneration valve</li> <li>- Main relay</li> <li>- air conditioner compressor relay</li> <li>- Exhaust camsh.control sol. valve</li> <li>- Intake camshaft control, solenoid valve</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Lambda probe heating (B1, S1)</li> <li>- Lambda probe heating (B1, S2)</li> <li>- Immobilizer, warning light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Variable intake valves control</li> <li>- Fuel evaporation cut-off valve</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Camshaft adjustment solenoid valve</li> <li>- Turbo charger bypass valve</li> </ul> </li> </ul>
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KIA						Lotze - Lotze 2.0 LPI										
Year	Engine	Liters	HP	System				Functions								
																<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> </ul> </li> </ul>

2005/08 -	I4	2.0	115	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>
2008/06 -	I4 Theta CVVT	2.0	140	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>



KIA						Magentis - Magentis 2.5i					
Year	Engine	Liters	HP	System		Functions					
2000/09 - 2005/12	G6BV	2.5	169	Gear box control HIVEC 2.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>					

KIA						Mohave - Mohave 3.0 CRDi					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Neutral position initialization</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Switch idle mode</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- Tiptronic switch: lower gear engagement</li> </ul> </li> </ul>					

2009/01 -		3.0	250	Gear box control 6-gears automatic transmission HIVEC 5.3	<ul style="list-style-type: none"> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Transmission</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Engine torque</li> <li>- Transmission selector lever position</li> <li>- Converter slip rotating speed</li> <li>- Switch magnetic valve C monitoring</li> <li>- Solenoid valve: fuel-line pressure</li> <li>- Solenoid valve: Pipe pressure, monitoring</li> <li>- Solenoid valve: Torque converter lock-up clutch</li> <li>- SV: TC lock-up clutch, monitoring</li> <li>- Fault codes count</li> <li>- Current switch magnetic valve C</li> <li>- Solenoid shift valve D current</li> <li>- Solenoid shift valve E current</li> <li>- Solenoid shift valve F current</li> <li>- Solenoid shift valve D monitoring</li> <li>- Solenoid shift valve E monitoring</li> <li>- Solenoid shift valve F monitoring</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- Solenoid valve: fuel-line pressure</li> <li>- Solenoid switch valve F</li> <li>- Torque converter clutch solenoid valve</li> </ul> </li> </ul>
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KIA Optima [TF] - Optima 1.7 CRDi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	D4FD	1.7	136 - 140	Gear box control 6-gears automatic transmission HIVEC 5.7	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- solenoid valve, converter clutch</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- Oil temperature sensor gear box</li> <li>- Inserted gear</li> <li>- throttle valve angle</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Sport switch</li> <li>- Engine torque</li> <li>- Automatic pressure control solenoid A</li> <li>- Sportronic switch upshift</li> <li>- Sportronic switch downshift</li> <li>- Torque converter-slip speed</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Transmission control fault lamp</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> <li>- Solenoid shift valve E</li> <li>- Solenoid shift valve F (A)</li> </ul> </li> </ul>
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KIA Optima [TF] - Optima 2.0					
Year	Engine	Liters	HP	System	Functions
2012/03 -	G4NA	2.0	165 - 170	Gear box control 6-gears automatic transmission HIVEC 5.7	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- solenoid valve, converter clutch</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- Oil temperature sensor gear box</li> <li>- Inserted gear</li> <li>- throttle valve angle</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Sport switch</li> <li>- Engine torque</li> <li>- Automatic pressure control solenoid A</li> <li>- Sportronic switch upshift</li> <li>- Sportronic switch downshift</li> <li>- Torque converter-slip speed</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Transmission control fault lamp</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> <li>- Solenoid shift valve E</li> <li>- Solenoid shift valve F (A)</li> </ul> </li> </ul>

KIA Optima [TF] - Optima 2.4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> </ul>

2012/03 -	G4KE	2.4	178 - 180	Gear box control 6-gears automatic transmission HIVEC 5.7	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- solenoid valve, converter clutch</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- Oil temperature sensor gear box</li> <li>- Inserted gear</li> <li>- throttle valve angle</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- Solenoid switch valve E</li> <li>- transmission ratio</li> <li>- Acceleration pedal position sensor</li> <li>- Current gear</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Sport switch</li> <li>- Engine torque</li> <li>- Automatic pressure control solenoid A</li> <li>- Sportronic switch upshift</li> <li>- Sportronic switch downshift</li> <li>- Torque converter-slip speed</li> <li>- Torque converter clutch status</li> <li>- Solenoid switch valve F</li> <li>- Transmission control fault lamp</li> <li>• <b>Actuators</b></li> <li>- Pressure-regulation magnetic valve</li> <li>- Torque converter clutch solenoid valve</li> <li>- Solenoid shift valve A</li> <li>- Solenoid shift valve B</li> <li>- Solenoid shift valve C</li> <li>- Solenoid shift valve D</li> <li>- Solenoid shift valve E</li> <li>- Solenoid shift valve F (A)</li> </ul>
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KIA					
Pride New - Pride New 1.5 VGT CRDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> </ul>

2005/05 -		1.5	152	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
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KIA Rondo - Rondo 2.4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Throttle valve position (bank 2)</li> <li>- Voltage, throttle valve position sensor</li> <li>- Vehicle driving speed</li> <li>- Coolant temperature sensor voltage</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- Coolant temperature</li> <li>- Pulse-duty factor, fuel tank ventilation valve</li> <li>- Input air quantity meter</li> <li>- Throttle valve position sensor</li> <li>- Idle regulator</li> <li>- signal, throttle valve</li> <li>- Engine revolution</li> <li>- engine loading</li> <li>- stop lights switch</li> <li>- Knock control, cylinder 1</li> <li>- Knock control, cylinder 2</li> <li>- Knock control, cylinder 3</li> <li>- Knock control, cylinder 4</li> <li>- idle signal</li> <li>- intake manifold pressure</li> <li>- turbo charger pressure</li> <li>- Air conditioner compressor relay</li> <li>- air quantity</li> <li>- Clutch switch</li> </ul> </li> </ul>

- recommended idle revolutions
- start signal
- Immobilizer
- Fuel shut-off solenoid valve
- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3
- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2

2006/09 - 2008/08	DOHC	2.4	164	Engine control Theta 2.0	<ul style="list-style-type: none"> <li>- harmful for catalytic converter lack of combustion cylinder 3</li> <li>- harmful for catalytic converter lack of combustion cylinder 4</li> <li>- Air conditioner switch</li> <li>- Air conditioner status</li> <li>- Catalytic converter heating status</li> <li>- test</li> <li>- Oxygen sensor heater (bank 1, sensor 1)</li> <li>- Oxygen sensor heater (bank 1, sensor 2)</li> <li>- transmission type coding</li> <li>- Brake test switch</li> <li>- Intake camshaft position actual value</li> <li>- Cooling agent pressure</li> <li>- Intake camshaft adjustment, set angle</li> <li>- Calculated cooling agent temperature</li> <li>- Metered engine oil temperature</li> <li>- Fuel level signal 2</li> <li>- Atmospheric pressure voltage sensor</li> <li>- Camshaft control</li> <li>- Charging-air pressure sensor voltage</li> <li>- Intake camshaft control, adaptation</li> <li>- Status electronic fuel pump</li> <li>- Lambda adaption status: Idle</li> <li>- Inlet camsh. timing control status</li> <li>- Exhaust camsh. timing contr. status</li> <li>- Atmospheric pressure sensor</li> <li>- Kilometer reading at MIL activation</li> <li>- Mileage in km on last maintenance</li> <li>- Power steering pressure</li> <li>- Magnetic valve camshaft adjustment</li> <li>- Torque converter-slip speed</li> <li>- Knock sensor test</li> <li>- A/C compressor status</li> <li>- Overtemperature protection</li> <li>- Alternator torque request</li> <li>- Throttle valve motor duty cycle 1</li> <li>- Battery status</li> <li>- Requested specified idling speed</li> <li>- Lambda sensor adaptation: Current timer offset</li> <li>- Knock detonation, offset adjustment adaption, cylinder 1</li> <li>- Knock detonation, offset adjustment adaption, cylinder 2</li> <li>- Knock detonation, offset adjustment adaption, cylinder 3</li> <li>- Knock detonation, offset adjustment adaption, cylinder 4</li> <li>- Intake air temperature on engine start</li> <li>- Time since ignition ON</li> <li>- Throttle valve angle: set value</li> <li>- Battery ageing</li> <li>- Lambda control (b1): Part load adaptation value</li> <li>- Variable tract intake manifold status</li> <li>- Alternator monitoring deactivation by wiper</li> <li>- Alternator monitoring deactivation by blower</li> <li>- Alternator monitoring deactivation by headlights</li> <li>- Battery temperature</li> <li>- Oxygen sensor status (B1, S1)</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Fuel shutoff status</li> <li>- PWM turbo charger bypass valve</li> <li>- Fuel tank pressure control valve</li> <li>- Throttle valve position</li> <li>- Lambda control status</li> <li>- Battery capacity</li> <li>- Intake air temperature sensor voltage</li> <li>- Throttle valve position: Full load</li> </ul>
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					<ul style="list-style-type: none"> <li>- PWM Generator</li> <li>- Auxiliary battery status</li> <li>- Throttle valve position 1</li> <li>- Throttle valve position 2</li> <li>- Camshaft / Crankshaft synchronization</li> <li>- Missfire detection counter Cylinder 1</li> <li>- Missfire detection counter Cylinder 2</li> <li>- Missfire detection counter Cylinder 3</li> <li>- Missfire detection counter Cylinder 4</li> <li>- Inlet camshaft timing control, duty cycle</li> <li>- Exhaust camshaft timing control, duty cycle</li> <li>- Fuel level sensor</li> <li>- Intake air pressure</li> <li>- Voltage intake air pressure sensor</li> <li>- Coolant temp. at engine start</li> <li>- Camshaft adjustment key combination</li> <li>- Turbo charger bypass valve</li> <li>- Throttle valve sensor reference voltage</li> <li>- Throttle valve fully closed</li> <li>- Long-term additive mixture correct.</li> <li>- Long-term multiplic. mixture correc.</li> <li>- Battery charge/discharge current</li> <li>- Battery current sensor voltage</li> <li>- Exhaust camshaft control position</li> <li>- Inlet camshaft control position</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Signal lamp for representing defect, engine control</li> <li>- Engine for reg. throttle valve</li> <li>- Injector (cylinder 1)</li> <li>- Injector (cylinder 2)</li> <li>- Injector (cylinder 4)</li> <li>- Injector (cylinder 4)</li> <li>- solenoid A turbo pressure restriction</li> <li>- fuel tank evaporation/regeneration valve</li> <li>- Main relay</li> <li>- air conditioner compressor relay</li> <li>- Exhaust camsh.control sol. valve</li> <li>- Intake camshaft control, solenoid valve</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Lambda probe heating (B1, S1)</li> <li>- Lambda probe heating (B1, S2)</li> <li>- Immobilizer, warning light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Variable intake valves control</li> <li>- Fuel evaporation cut-off valve</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Camshaft adjustment solenoid valve</li> <li>- Turbo charger bypass valve</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Throttle valve position (bank 2)</li> <li>- Voltage, throttle valve position sensor</li> <li>- Vehicle driving speed</li> <li>- Coolant temperature sensor voltage</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- Coolant temperature</li> </ul> </li> </ul>



- Pulse-duty factor, fuel tank ventilation valve
- Input air quantity meter
- Throttle valve position sensor
- Idle regulator
- signal, throttle valve
- Engine revolution
- engine loading
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- idle signal
- intake manifold pressure
- turbo charger pressure
- Air conditioner compressor relay
- air quantity
- Clutch switch
- recommended idle revolutions
- start signal
- Immobilizer
- Fuel shut-off solenoid valve
- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3
- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank

2008/09 -	DOHC	2.4	177	Engine control Theta 2.0	<ul style="list-style-type: none"> <li>- Throttle valves servo motor control</li> <li>- Throttle valve servo motor position</li> <li>- Cooling agent temperature motor</li> <li>- Gas pedal position sensor 1 Voltage</li> <li>- Gas pedal position sensor 2 Voltage</li> <li>- Ignition angle Cylinder 1</li> <li>- Camshaft intake valves (bank 1), resultant value</li> <li>- Camshaft exhaust valves (bank 1), actual value</li> <li>- Camshaft exhaust valves (bank 1), resultant value</li> <li>- Outdoor temperature sensor voltage</li> <li>- Transmission, specified torque</li> <li>- Lambda target value</li> <li>- Lambda actual value</li> <li>- harmful for catalytic converter lack of combustion cylinder 1</li> <li>- harmful for catalytic converter lack of combustion cylinder 2</li> <li>- harmful for catalytic converter lack of combustion cylinder 3</li> <li>- harmful for catalytic converter lack of combustion cylinder 4</li> <li>- Air conditioner switch</li> <li>- Air conditioner status</li> <li>- Catalytic converter heating status</li> <li>- test</li> <li>- Oxygen sensor heater (bank 1, sensor 1)</li> <li>- Oxygen sensor heater (bank 1, sensor 2)</li> <li>- transmission type coding</li> <li>- Brake test switch</li> <li>- Intake camshaft position actual value</li> <li>- Cooling agent pressure</li> <li>- Intake camshaft adjustment, set angle</li> <li>- Calculated cooling agent temperature</li> <li>- Metered engine oil temperature</li> <li>- Fuel level signal 2</li> <li>- Atmospheric pressure voltage sensor</li> <li>- Camshaft control</li> <li>- Charging-air pressure sensor voltage</li> <li>- Intake camshaft control, adaptation</li> <li>- Status electronic fuel pump</li> <li>- Lambda adaption status: Idle</li> <li>- Inlet camsh. timing control status</li> <li>- Exhaust camsh. timing contr. status</li> <li>- Atmospheric pressure sensor</li> <li>- Kilometer reading at MIL activation</li> <li>- Mileage in km on last maintenance</li> <li>- Power steering pressure</li> <li>- Magnetic valve camshaft adjustment</li> <li>- Torque converter-slip speed</li> <li>- Knock sensor test</li> <li>- A/C compressor status</li> <li>- Overtemperature protection</li> <li>- Alternator torque request</li> <li>- Throttle valve motor duty cycle 1</li> <li>- Battery status</li> <li>- Requested specified idling speed</li> <li>- Lambda sensor adaptation: Current timer offset</li> <li>- Knock detonation, offset adjustment adaption, cylinder 1</li> <li>- Knock detonation, offset adjustment adaption, cylinder 2</li> <li>- Knock detonation, offset adjustment adaption, cylinder 3</li> <li>- Knock detonation, offset adjustment adaption, cylinder 4</li> <li>- Intake air temperature on engine start</li> <li>- Time since ignition ON</li> </ul>
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- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination
- Turbo charger bypass valve
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Long-term additive mixture correct.
- Long-term multiplic. mixture correc.
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position
- **Actuators**
  - Fuel pump relay
  - Signal lamp for representing defect, engine control
  - Engine for reg. throttle valve
  - Injector (cylinder 1)
  - Injector (cylinder 2)
  - Injector (cylinder 4)
  - Injector (cylinder 4)
  - solenoid A turbo pressure restriction
  - fuel tank evaporation/regeneration valve
  - Main relay
  - air conditioner compressor relay
  - Exhaust camsh.control sol. valve
  - Intake camshaft control, solenoid valve
  - Switchable intake manifold, solenoid valve
  - Lambda probe heating (B1, S1)
  - Lambda probe heating (B1, S2)
  - Immobilizer, warning light
  - Ignition coil Cylinder 1
  - Ignition coil Cylinder 2
  - Ignition coil Cylinder 3
  - Ignition coil Cylinder 4
  - Variable intake valves control
  - Fuel evaporation cut-off valve

					<ul style="list-style-type: none"> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Camshaft adjustment solenoid valve</li> <li>- Turbo charger bypass valve</li> </ul>
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KIA Sedona - Sedona 3.8i					
Year	Engine	Liters	HP	System	Functions
2005/09 -		3.8	254	Gear box control 5-gears automatic transmission HIVEC 4.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Engine revolution</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Electronic control unit supply voltage</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- Shut-off solenoid valve 2/4</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid valve 1/reverse-gear locking</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Shut-off solenoid valve 2/4</li> </ul> </li> </ul>

KIA Sorento - Sorento 2.5 VGT CRDi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> </ul> </li> </ul>

2005/02 -		2.5	174	Gear box control 5-gears automatic transmission HIVEC 4.1	<ul style="list-style-type: none"> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- CAN communication</li> <li>- Brake pedal switch</li> <li>- Gear lever position</li> <li>- Transmission output speed</li> <li>- Transmission indication</li> <li>- Converter slip rotating speed</li> <li>- Start inhibit switch 1</li> <li>- Start inhibit switch 2</li> <li>- Start inhibit switch 3</li> <li>- Start inhibit switch 4</li> <li>- Gearbox oil temperature 1</li> <li>- Gearbox oil temperature 2</li> <li>- Backup lights</li> <li>- Oil pressure switch 6</li> <li>- Oil pressure switch 5</li> <li>- Oil pressure switch 3</li> <li>- Oil pressure switch 2</li> <li>- Oil pressure switch 1</li> <li>- Solenoid valve: Torque converter lock-up clutch, monitoring</li> <li>- Solenoid valve: fuel-line pressure</li> <li>- Solenoid valve: Pipe pressure, monitoring</li> <li>- Input clutch, solenoid</li> <li>- Solenoid valve: Input clutch, monitoring</li> <li>- Solenoid valve: Front wheel brake</li> <li>- Solenoid valve: front brake, monitoring</li> <li>- Solenoid valve: Torque converter lock-up clutch</li> <li>- SV: TC lock-up clutch, monitoring</li> <li>- Solenoid valve: Reverse clutch</li> <li>- Solenoid valve: reverse clutch, monitoring</li> </ul>
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KIA Sorento - Sorento 3.8					
Year	Engine	Liters	HP	System	Functions
2006/09 - 2008/08	Lambda V6	3.8	267	Gear box control 5-gears automatic transmission HIVEC 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- CAN communication</li> <li>- Brake pedal switch</li> <li>- Gear lever position</li> <li>- Transmission output speed</li> <li>- Transmission indication</li> <li>- Converter slip rotating speed</li> <li>- Start inhibit switch 1</li> <li>- Start inhibit switch 2</li> <li>- Start inhibit switch 3</li> <li>- Start inhibit switch 4</li> <li>- Gearbox oil temperature 1</li> <li>- Gearbox oil temperature 2</li> <li>- Backup lights</li> <li>- Oil pressure switch 6</li> <li>- Oil pressure switch 5</li> <li>- Oil pressure switch 3</li> <li>- Oil pressure switch 2</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Oil pressure switch 1</li> <li>- Solenoid valve: Torque converter lock-up clutch, monitoring</li> <li>- Solenoid valve: fuel-line pressure</li> <li>- Solenoid valve: Pipe pressure, monitoring</li> <li>- Input clutch, solenoid</li> <li>- Solenoid valve: Input clutch, monitoring</li> <li>- Solenoid valve: Front wheel brake</li> <li>- Solenoid valve: front brake, monitoring</li> <li>- Solenoid valve: Torque converter lock-up clutch</li> <li>- SV: TC lock-up clutch, monitoring</li> <li>- Solenoid valve: Reverse clutch</li> <li>- Solenoid valve: reverse clutch, monitoring</li> </ul>
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**KIA Sorento [JC] - Sorento 2.5 CRDi**

Year	Engine	Liters	HP	System	Functions
2002/07 - 2009/08	D4CB	2.5	140	Gear box control 5-gears automatic transmission HIVEC 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- CAN communication</li> <li>- Brake pedal switch</li> <li>- Gear lever position</li> <li>- Transmission output speed</li> <li>- Transmission indication</li> <li>- Convertor slip rotating speed</li> <li>- Start inhibit switch 1</li> <li>- Start inhibit switch 2</li> <li>- Start inhibit switch 3</li> <li>- Start inhibit switch 4</li> <li>- Gearbox oil temperature 1</li> <li>- Gearbox oil temperature 2</li> <li>- Backup lights</li> <li>- Oil pressure switch 6</li> <li>- Oil pressure switch 5</li> <li>- Oil pressure switch 3</li> <li>- Oil pressure switch 2</li> <li>- Oil pressure switch 1</li> <li>- Solenoid valve: Torque converter lock-up clutch, monitoring</li> <li>- Solenoid valve: fuel-line pressure</li> <li>- Solenoid valve: Pipe pressure, monitoring</li> <li>- Input clutch, solenoid</li> <li>- Solenoid valve: Input clutch, monitoring</li> <li>- Solenoid valve: Front wheel brake</li> <li>- Solenoid valve: front brake, monitoring</li> <li>- Solenoid valve: Torque converter lock-up clutch</li> <li>- SV: TC lock-up clutch, monitoring</li> <li>- Solenoid valve: Reverse clutch</li> <li>- Solenoid valve: reverse clutch, monitoring</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> </ul>

2006/03 - 2009/08	D4CB	2.5	170	Gear box control 5-gears automatic transmission HIVEC 4.1	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- CAN communication</li> <li>- Brake pedal switch</li> <li>- Gear lever position</li> <li>- Transmission output speed</li> <li>- Transmission indication</li> <li>- Converter slip rotating speed</li> <li>- Start inhibit switch 1</li> <li>- Start inhibit switch 2</li> <li>- Start inhibit switch 3</li> <li>- Start inhibit switch 4</li> <li>- Gearbox oil temperature 1</li> <li>- Gearbox oil temperature 2</li> <li>- Backup lights</li> <li>- Oil pressure switch 6</li> <li>- Oil pressure switch 5</li> <li>- Oil pressure switch 3</li> <li>- Oil pressure switch 2</li> <li>- Oil pressure switch 1</li> <li>- Solenoid valve: Torque converter lock-up clutch, monitoring</li> <li>- Solenoid valve: fuel-line pressure</li> <li>- Solenoid valve: Pipe pressure, monitoring</li> <li>- Input clutch, solenoid</li> <li>- Solenoid valve: Input clutch, monitoring</li> <li>- Solenoid valve: Front wheel brake</li> <li>- Solenoid valve: front brake, monitoring</li> <li>- Solenoid valve: Torque converter lock-up clutch</li> <li>- SV: TC lock-up clutch, monitoring</li> <li>- Solenoid valve: Reverse clutch</li> <li>- Solenoid valve: reverse clutch, monitoring</li> </ul>
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KIA Sorento [JC] - Sorento 3.5i					
Year	Engine	Liters	HP	System	Functions
2003/03 - 2009/08	G6CU	3.5	195	Gear box control 5-gears automatic transmission HIVEC 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- CAN communication</li> <li>- Brake pedal switch</li> <li>- Gear lever position</li> <li>- Transmission output speed</li> <li>- Transmission indication</li> <li>- Converter slip rotating speed</li> <li>- Start inhibit switch 1</li> <li>- Start inhibit switch 2</li> <li>- Start inhibit switch 3</li> <li>- Start inhibit switch 4</li> <li>- Gearbox oil temperature 1</li> </ul>

					<ul style="list-style-type: none"> <li>- Gearbox oil temperature 2</li> <li>- Backup lights</li> <li>- Oil pressure switch 6</li> <li>- Oil pressure switch 5</li> <li>- Oil pressure switch 3</li> <li>- Oil pressure switch 2</li> <li>- Oil pressure switch 1</li> <li>- Solenoid valve: Torque converter lock-up clutch, monitoring</li> <li>- Solenoid valve: fuel-line pressure</li> <li>- Solenoid valve: Pipe pressure, monitoring</li> <li>- Input clutch, solenoid</li> <li>- Solenoid valve: Input clutch, monitoring</li> <li>- Solenoid valve: Front wheel brake</li> <li>- Solenoid valve: front brake, monitoring</li> <li>- Solenoid valve: Torque converter lock-up clutch</li> <li>- SV: TC lock-up clutch, monitoring</li> <li>- Solenoid valve: Reverse clutch</li> <li>- Solenoid valve: reverse clutch, monitoring</li> </ul>
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<b>KIA</b>	<b>Sorento [JC] - Sorento 3.8i</b>
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Year	Engine	Liters	HP	System	Functions
2006/12 - 2008/08	G6DA	3.8	267	Gear box control 5-gears automatic transmission HIVEC 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- gears engagement control</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- CAN communication</li> <li>- Brake pedal switch</li> <li>- Gear lever position</li> <li>- Transmission output speed</li> <li>- Transmission indication</li> <li>- Convertor slip rotating speed</li> <li>- Start inhibit switch 1</li> <li>- Start inhibit switch 2</li> <li>- Start inhibit switch 3</li> <li>- Start inhibit switch 4</li> <li>- Gearbox oil temperature 1</li> <li>- Gearbox oil temperature 2</li> <li>- Backup lights</li> <li>- Oil pressure switch 6</li> <li>- Oil pressure switch 5</li> <li>- Oil pressure switch 3</li> <li>- Oil pressure switch 2</li> <li>- Oil pressure switch 1</li> <li>- Solenoid valve: Torque converter lock-up clutch, monitoring</li> <li>- Solenoid valve: fuel-line pressure</li> <li>- Solenoid valve: Pipe pressure, monitoring</li> <li>- Input clutch, solenoid</li> <li>- Solenoid valve: Input clutch, monitoring</li> <li>- Solenoid valve: Front wheel brake</li> <li>- Solenoid valve: front brake, monitoring</li> <li>- Solenoid valve: Torque converter lock-up clutch</li> <li>- SV: TC lock-up clutch, monitoring</li> <li>- Solenoid valve: Reverse clutch</li> <li>- Solenoid valve: reverse clutch, monitoring</li> </ul> </li> </ul>



Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Control unit reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor pressure signal</li> <li>- Air compressor request</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Oxygen sensor, bank 1</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- Knock control, cylinder 1</li> <li>- Knock control, cylinder 2</li> <li>- Knock control, cylinder 3</li> <li>- Knock control, cylinder 4</li> <li>- fuel correction (bank 1)</li> <li>- Knock sensor 1 (bank 1)</li> <li>- switch steering wheel servo</li> <li>- Main relay</li> <li>- Throttle valve angle, potentiometer path 1</li> <li>- Throttle valve angle, potentiometer path 2</li> <li>- Intake air temperature</li> <li>- Throttle valve signal</li> <li>- Ignition</li> <li>- Battery voltage activation</li> <li>- Throttle valve position sensor 1</li> <li>- Throttle valve position sensor 2</li> <li>- Oxygen sensor bank 1, sensor 1)</li> <li>- Oxygen sensor (bank 1, sensor 2)</li> <li>- Pulse-duty factor, exhausted gases valve actuator</li> <li>- Wiper switch</li> <li>- Headlights</li> <li>- Engine operation detected</li> <li>- Clutch pedal switch</li> <li>- intake manifold pressure sensor</li> <li>- Pulse duty factor, intake manifold valve</li> <li>- Ambient pressure</li> <li>- MIL-Status</li> <li>- Switch identification</li> <li>- Throttle valves servo motor control</li> <li>- Idle running speed target value</li> <li>- Gas pedal position sensor 1 Voltage</li> <li>- Gas pedal position sensor 2 Voltage</li> <li>- Ignition angle Cylinder 1</li> <li>- Ignition angle Cylinder 2</li> <li>- Ignition angle Cylinder 3</li> <li>- Ignition angle Cylinder 4</li> <li>- Fuel evaporation control valve, spray rate</li> <li>- Short-term mix. correction B1 (OBD)</li> <li>- Lambda target value</li> <li>- Lambda actual value</li> <li>- Air conditioner pressure sensor voltage</li> <li>- harmful for catalytic converter lack of combustion cylinder 1</li> <li>- harmful for catalytic converter lack of combustion cylinder 2</li> <li>- harmful for catalytic converter lack of</li> </ul> </li> </ul>

2009/09

G4KE

2.4

174

Engine control  
Theta 2.2

combustion cylinder 3

- harmful for catalytic converter lack of

combustion cylinder 4

- Cruise control indicator lamp CRUISE

- Cruise control indicator lamp SET

- Battery charging status

- Lambda probe heating resistance (B1, S1)

- Lambda probe heating resistance (B1, S2)

- Air conditioner compressor control

- Brake test switch

- Oxygen sensor bank 1, sensor 1)

- Oxygen sensor bank 2, sensor 1)

- Cooling agent temperature voltage

- Turbine wheel speed

- Cruise control switch status

- Cruise control on/off switch

- Engine speed actual value

- Inlet camsh. timing control status

- Kilometer reading at MIL activation

- Gas pedal position

- Cylinder 1 knock sensor ZW correction

- Cylinder 2 knock sensor ZW correction

- Cylinder 3 knock sensor ZW correction

- Cylinder 4 knock sensor ZW correction

- Telephone antenna signal strength

- Cruise control switch signal voltage

- Control unit sensor voltage 4

- Engine operating mode

- Generator charge signal

- Heated catalyst enabled

- Mileage since fault memory cleared

- Electric fuel pump control unit actuation

- Battery state

- Inlet camshaft control test (b1): result

- Exhaust camshaft adjustment test B1: Result

- Diagnostic connector VIM status

- Intake air temperature on engine start

- Time since ignition ON

- Exhaust system injection PWM signal

- Short-term oxygen sensor control adjustment

B1

- Throttle valve position: closed

- Alternator load signal filtered raw value

- Transmission oil temperature: calculated

- AC start/stop authorization

- Fan high speed

- Fan low speed

- Right overheating protection control unit

- Inlet camshaft reset valve B1

- Exhaust camshaft reset valve B1

- Battery temperature

- Battery capacity

- Battery discharge status

- Intake air temperature sensor voltage

- Throttle valve position: Full load

- PWM Generator

- Camshaft / Crankshaft synchronization

- Missfire detection counter Cylinder 1

- Missfire detection counter Cylinder 2

- Missfire detection counter Cylinder 3

- Missfire detection counter Cylinder 4

- Control unit sensor voltage 3

- Voltage intake air pressure sensor

- Coolant temp. at engine start

- Lambda control loop monitoring

- Fresh air blower, maximum speed

- Battery charge/discharge current

- Injection time/cylinder 1

					<ul style="list-style-type: none"> <li>- Injection time/cylinder 2</li> <li>- Injection time/cylinder 3</li> <li>- Injection time/cylinder 4</li> <li>- Var. valve timing press. switch/exh.</li> <li>- Sensor reference voltage 1</li> <li>- Sensor reference voltage 2</li> <li>- Part load status</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Disconnection of fuel injector Cylinder 1</li> <li>- Disconnection of fuel injector Cylinder 2</li> <li>- Disconnection of fuel injector Cylinder 3</li> <li>- Disconnection of fuel injector Cylinder 4</li> <li>- Fuel pump relay</li> <li>- Engine for reg. throttle valve</li> <li>- Main relay</li> <li>- air conditioner compressor relay</li> <li>- Container valve</li> <li>- Engine management system error lights</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Exhaust camshaft timing control (bank 1)</li> <li>- Immobilizer control lamp</li> <li>- Speed control light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Oxygen sensor heating, sensor 1</li> <li>- Oxygen sensor heating, sensor 2</li> <li>- Variable intake system solenoid valve</li> </ul> </li> </ul>
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KIA Sorento [XM] - Sorento 2.4 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Control unit reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor pressure signal</li> <li>- Air compressor request</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Oxygen sensor, bank 1</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- Knock control, cylinder 1</li> <li>- Knock control, cylinder 2</li> <li>- Knock control, cylinder 3</li> <li>- Knock control, cylinder 4</li> <li>- fuel correction (bank 1)</li> <li>- Knock sensor 1 (bank 1)</li> <li>- switch steering wheel servo</li> <li>- Main relay</li> <li>- Throttle valve angle, potentiometer path 1</li> <li>- Throttle valve angle, potentiometer path 2</li> <li>- Intake air temperature</li> <li>- Throttle valve signal</li> <li>- Ignition</li> <li>- Battery voltage activation</li> <li>- Throttle valve position sensor 1</li> <li>- Throttle valve position sensor 2</li> </ul> </li> </ul>

2009/09 -	G4KE	2.4	174	Engine control Theta 2.2	<ul style="list-style-type: none"> <li>- Oxygen sensor bank 1, sensor 1)</li> <li>- Oxygen sensor (bank 1, sensor 2)</li> <li>- Pulse-duty factor, exhausted gases valve actuator</li> <li>- Wiper switch</li> <li>- Headlights</li> <li>- Engine operation detected</li> <li>- Clutch pedal switch</li> <li>- intake manifold pressure sensor</li> <li>- Pulse duty factor, intake manifold valve</li> <li>- Ambient pressure</li> <li>- MIL-Status</li> <li>- Switch identification</li> <li>- Throttle valves servo motor control</li> <li>- Idle running speed target value</li> <li>- Gas pedal position sensor 1 Voltage</li> <li>- Gas pedal position sensor 2 Voltage</li> <li>- Ignition angle Cylinder 1</li> <li>- Ignition angle Cylinder 2</li> <li>- Ignition angle Cylinder 3</li> <li>- Ignition angle Cylinder 4</li> <li>- Fuel evaporation control valve, spray rate</li> <li>- Short-term mix. correction B1 (OBD)</li> <li>- Lambda target value</li> <li>- Lambda actual value</li> <li>- Air conditioner pressure sensor voltage</li> <li>- harmful for catalytic converter lack of combustion cylinder 1</li> <li>- harmful for catalytic converter lack of combustion cylinder 2</li> <li>- harmful for catalytic converter lack of combustion cylinder 3</li> <li>- harmful for catalytic converter lack of combustion cylinder 4</li> <li>- Cruise control indicator lamp CRUISE</li> <li>- Cruise control indicator lamp SET</li> <li>- Battery charging status</li> <li>- Lambda probe heating resistance (B1, S1)</li> <li>- Lambda probe heating resistance (B1, S2)</li> <li>- Air conditioner compressor control</li> <li>- Brake test switch</li> <li>- Oxygen sensor bank 1, sensor 1)</li> <li>- Oxygen sensor bank 2, sensor 1)</li> <li>- Cooling agent temperature voltage</li> <li>- Turbine wheel speed</li> <li>- Cruise control switch status</li> <li>- Cruise control on/off switch</li> <li>- Engine speed actual value</li> <li>- Inlet camsh. timing control status</li> <li>- Kilometer reading at MIL activation</li> <li>- Gas pedal position</li> <li>- Cylinder 1 knock sensor ZW correction</li> <li>- Cylinder 2 knock sensor ZW correction</li> <li>- Cylinder 3 knock sensor ZW correction</li> <li>- Cylinder 4 knock sensor ZW correction</li> <li>- Telephone antenna signal strength</li> <li>- Cruise control switch signal voltage</li> <li>- Control unit sensor voltage 4</li> <li>- Engine operating mode</li> <li>- Generator charge signal</li> <li>- Heated catalyst enabled</li> <li>- Mileage since fault memory cleared</li> <li>- Electric fuel pump control unit actuation</li> <li>- Battery state</li> <li>- Inlet camshaft control test (b1): result</li> <li>- Exhaust camshaft adjustment test B1: Result</li> <li>- Diagnostic connector VIM status</li> <li>- Intake air temperature on engine start</li> </ul>
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					<ul style="list-style-type: none"> <li>- Time since ignition ON</li> <li>- Exhaust system injection PWM signal</li> <li>- Short-term oxygen sensor control adjustment</li> </ul> <b>B1</b> <ul style="list-style-type: none"> <li>- Throttle valve position: closed</li> <li>- Alternator load signal filtered raw value</li> <li>- Transmission oil temperature: calculated</li> <li>- AC start/stop authorization</li> <li>- Fan high speed</li> <li>- Fan low speed</li> <li>- Right overheating protection control unit</li> <li>- Inlet camshaft reset valve B1</li> <li>- Exhaust camshaft reset valve B1</li> <li>- Battery temperature</li> <li>- Battery capacity</li> <li>- Battery discharge status</li> <li>- Intake air temperature sensor voltage</li> <li>- Throttle valve position: Full load</li> <li>- PWM Generator</li> <li>- Camshaft / Crankshaft synchronization</li> <li>- Missfire detection counter Cylinder 1</li> <li>- Missfire detection counter Cylinder 2</li> <li>- Missfire detection counter Cylinder 3</li> <li>- Missfire detection counter Cylinder 4</li> <li>- Control unit sensor voltage 3</li> <li>- Voltage intake air pressure sensor</li> <li>- Coolant temp. at engine start</li> <li>- Lambda control loop monitoring</li> <li>- Fresh air blower, maximum speed</li> <li>- Battery charge/discharge current</li> <li>- Injection time/cylinder 1</li> <li>- Injection time/cylinder 2</li> <li>- Injection time/cylinder 3</li> <li>- Injection time/cylinder 4</li> <li>- Var. valve timing press. switch/exh.</li> <li>- Sensor reference voltage 1</li> <li>- Sensor reference voltage 2</li> <li>- Part load status</li> </ul> <b>• Actuators</b> <ul style="list-style-type: none"> <li>- Disconnection of fuel injector Cylinder 1</li> <li>- Disconnection of fuel injector Cylinder 2</li> <li>- Disconnection of fuel injector Cylinder 3</li> <li>- Disconnection of fuel injector Cylinder 4</li> <li>- Fuel pump relay</li> <li>- Engine for reg. throttle valve</li> <li>- Main relay</li> <li>- air conditioner compressor relay</li> <li>- Container valve</li> <li>- Engine management system error lights</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Exhaust camshaft timing control (bank 1)</li> <li>- Immobilizer control lamp</li> <li>- Speed control light</li> <li>- Ignition coil Cylinder 1</li> <li>- Ignition coil Cylinder 2</li> <li>- Ignition coil Cylinder 3</li> <li>- Ignition coil Cylinder 4</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: low speed</li> <li>- Oxygen sensor heating, sensor 1</li> <li>- Oxygen sensor heating, sensor 2</li> <li>- Variable intake system solenoid valve</li> </ul>
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<b>KIA</b>					<b>Spectra - Spectra 2.0i</b>	
<b>Year</b>	<b>Engine</b>	<b>Liters</b>	<b>HP</b>	<b>System</b>	<b>Functions</b>	

2003/09  
-  
2007/08

2.0

127

Gear box control  
4-gears automatic transmission HIVEC 5.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
- **Error memory**
- **Current values**
  - Air compressor request
  - Vehicle driving speed
  - throttle valve position
  - Magnetic valve for reverse gear lock
  - Engine revolution
  - switch, brakes
  - engine torque
  - Solenoid switch valve A
  - gear box oil temperature
  - transmission ratio
  - gears engagement control
  - Solenoid valve: direct gear direct gear
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Tiptronic switch: identification
  - Overdrive solenoid valve
  - Gear lever position
  - Gearbox input speed
  - Transmission output speed
  - Convertor slip rotating speed
  - Magnetic valve for crawling speed
  - solenoid brake band
  - AT-air control magnetic valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
- **Actuators**
  - Magnetic valve for reverse gear lock
  - Solenoid switch valve A
  - Solenoid valve: direct gear direct gear
  - Magnetic valve for crawling speed
  - solenoid brake band
  - Magnetic valve for cruising gear
  - Pressure-regulation magnetic valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3

Gear box control  
HIVEC 2.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
- **Error memory**
- **Current values**
  - Air compressor request
  - Vehicle driving speed
  - throttle valve position
  - Switch idle mode
  - Magnetic valve for reverse gear lock
  - Engine revolution
  - switch, brakes
  - engine torque
  - cruise control switch
  - gear box oil temperature
  - gears engagement control
  - Solenoid valve: direct gear direct gear
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Tiptronic switch: identification
  - Overdrive solenoid valve
  - Gear lever position
  - Gearbox input speed

					<ul style="list-style-type: none"> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>
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KIA Spectra Hatchback - Spectra 2.0i Hatchback					
Year	Engine	Liters	HP	System	Functions
2003/09 - 2004/08		2.0	127	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>

KIA Spectra5 Hatchback - Spectra5 2.0i 16V Hatchback					
Year	Engine	Liters	HP	System	Functions

2004/09 -		2.0	140	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>
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KIA Sportage - Sportage 2.0					
Year	Engine	Liters	HP	System	Functions
1995/08 -	HW	2.0	87	Gear box control	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> </ul> </li> </ul>



2002/05				4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
2009/09 - 2010/08		2.0	142	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

2008/09 - 2010/08	2.0	142	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
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KIA Sportage - Sportage 2.0 TCI					
Year	Engine	Liters	HP	System	Functions
1995/08					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> </ul> </li> </ul>

- 2002/05	RF	2.0	87	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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KIA					Sportage - Sportage 2.0i 4x4	
Year	Engine	Liters	HP	System	Functions	
				Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> </ul> </li> </ul>	

2004/09 - 2008/07	Beta II DOHC	2.0	142		<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
				Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>
2009/09 - 2010/08		2.0	142	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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**KIA Sportage - Sportage 2.0 4x4**

Year	Engine	Liters	HP	System	Functions
2008/09 - 2010/08		2.0	142	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> </ul>

KIA Sportage - Sportage 2.0i					
Year	Engine	Liters	HP	System	Functions
2004/09 - 2008/08	Beta II DOHC	2.0	142	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> </ul>

KIA Sportage New - Sportage New 2.0i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> </ul> </li> </ul>

2004/08  
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2.0

142

Gear box control  
4-gears automatic transmission HIVEC 5.1

- transmission ratio
- gears engagement control
- Solenoid valve: direct gear direct gear
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Tiptronic switch: identification
- Overdrive solenoid valve
- Gear lever position
- Gearbox input speed
- Transmission output speed
- Convertor slip rotating speed
- Magnetic valve for crawling speed
- solenoid brake band
- AT-air control magnetic valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- **Actuators**
  - Magnetic valve for reverse gear lock
  - Solenoid switch valve A
  - Solenoid valve: direct gear direct gear
  - Magnetic valve for crawling speed
  - solenoid brake band
  - Magnetic valve for cruising gear
  - Pressure-regulation magnetic valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3

Gear box control  
HIVEC 2.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
- **Error memory**
- **Current values**
  - Air compressor request
  - Vehicle driving speed
  - throttle valve position
  - Switch idle mode
  - Magnetic valve for reverse gear lock
  - Engine revolution
  - switch, brakes
  - engine torque
  - cruise control switch
  - gear box oil temperature
  - gears engagement control
  - Solenoid valve: direct gear direct gear
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Tiptronic switch: identification
  - Overdrive solenoid valve
  - Gear lever position
  - Gearbox input speed
  - Transmission output speed
  - Automatic transmission power supply
  - Convertor slip rotating speed
  - Magnetic valve for crawling speed
  - solenoid brake band
  - Mode switch Hold
  - AT-air control magnetic valve
  - Brake tape reduction magnetic valve
- **Actuators**
  - Magnetic valve for reverse gear lock
  - Solenoid valve: direct gear direct gear
  - Magnetic valve for crawling speed
  - solenoid brake band
  - Magnetic valve for cruising gear
  - Power supply relay

- Brake tape reduction magnetic valve

KIA Sportage New - Sportage New 2.7i					
Year	Engine	Liters	HP	System	Functions
2004/09 - 2008/08		2.7	175	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> </ul> </li> </ul>



2008/09 - 2010/08	Delta V6	2.7	175	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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KIA Sportage New - Sportage New 2.7i 4x4					
Year	Engine	Liters	HP	System	Functions
2008/09 - 2010/08	Delta V6	2.7	175	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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**KIA Sportage New - Sportage New 2.0 VGT CRDi**

Year	Engine	Liters	HP	System	Functions
				Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- kick-down switch</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Engine torque</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Shift release</li> <li>- Convertor slip rotating speed</li> <li>- Gearshift solenoid 3</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Operating mode switch</li> <li>- Driving mode</li> <li>- Target Gear</li> <li>- Gear hold button</li> <li>- Clutch damper solenoid valve</li> <li>- AT-air control magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Gearshift solenoid 5</li> <li>- Gearshift solenoid 4</li> <li>- Pressure control solenoid 1 status</li> <li>- Pressure control solenoid 2 status</li> <li>- Pressure control solenoid 3 status</li> <li>- Pressure control solenoid 4 status</li> <li>- Pressure control solenoid 5 status</li> <li>- Syst. press. solen. valve duty cycle</li> <li>- Torque conv. lock-up clutch status</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> </ul> </li> </ul>

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Gear box control  
4-gears automatic transmission GS 12

- Press. build-up/reduc. solenoid valve
- solenoid brake band
- Magnetic valve for cruising gear
- Brake tape reduction magnetic valve
- Power supply relay gearbox
- Pressure-regulation magnetic valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Torque converter clutch solenoid valve
- Gear indicator lamp D1
- Gear indicator lamp D2
- Gear indicator lamp D3
- Gear indicator lamp D4
- Gear indicator lamp D5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
- **Error memory**
- **Current values**
  - Air compressor request
  - Vehicle driving speed
  - throttle valve position
  - Magnetic valve for reverse gear lock
  - Engine revolution
  - cruise control switch
  - Solenoid switch valve A
  - Solenoid switch valve B
  - Solenoid switch valve C
  - Solenoid switch valve D
  - gear box oil temperature
  - transmission ratio
  - gears engagement control
  - Solenoid valve: direct gear direct gear
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Tiptronic switch: identification
  - Overdrive solenoid valve
  - Gear lever position
  - Gearbox input speed
  - Transmission output speed
  - Switch for overdrive deactivation
  - Converter slip rotating speed
  - Automatic pressure control solenoid A
  - Automatic pressure control solenoid B
  - Magnetic valve for crawling speed
  - solenoid brake band
  - AT-air control magnetic valve
  - Brake tape reduction magnetic valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure-regulation magnetic valve 5
- **Actuators**
  - Magnetic valve for reverse gear lock
  - Solenoid valve: direct gear direct gear
  - Selector lever position indication: 5
  - Selector lever position indication: 4
  - Selector lever position indication: 3
  - Selector lever position indication: 2
  - Selector lever position indication: 1
  - Magnetic valve for crawling speed
  - solenoid brake band
  - Magnetic valve for cruising gear

					<ul style="list-style-type: none"> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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**KIA Sportage New - Sportage New 2.0 CRDi**

Year	Engine	Liters	HP	System	Functions
2004/08 -		2.0	136	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> </ul> </li> </ul>

- Pressure-regulation magnetic valve 3

KIA Sportage [JA] - Sportage 2.0i					
Year	Engine	Liters	HP	System	Functions
2000/10 - 2004/08	FE	2.0	118	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>

KIA Sportage [JE] - Sportage 2.0i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> </ul> </li> </ul>

2004/09 - 2007/04	G4GC	2.0	141	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
				Gear box control HIVEC 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Switch idle mode</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- cruise control switch</li> <li>- gear box oil temperature</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Automatic transmission power supply</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Mode switch Hold</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Power supply relay</li> <li>- Brake tape reduction magnetic valve</li> </ul>
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KIA Sportage [JE] - Sportage 2.0i 4x4					
Year	Engine	Liters	HP	System	Functions
2004/09 - 2007/04	G4GC	2.0	141	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>

KIA Sportage [JE] - Sportage 2.7i 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> </ul> </li> </ul>

2004/09 - 2007/04	G6BA	2.7	175	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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KIA Sportage [JE] - Sportage 2.0					
Year	Engine	Liters	HP	System	Functions
2007/05 - 2010/05	G4GC	2.0	141	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Adjustments / settings <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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KIA Sportage [JE] - Sportage 2.0 4x4					
Year	Engine	Liters	HP	System	Functions
2007/05 - 2010/05	G4GC	2.0	141	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Convertor slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>

Year	Engine	Liters	HP	System	Functions
2007/05 - 2010/05	G6BA	2.7	175	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>

KIA Sportage [JE] - Sportage 2.7 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- switch, brakes</li> <li>- engine torque</li> <li>- Solenoid switch valve A</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> </ul> </li> </ul>

2007/05 - 2010/05	G6BA	2.7	175	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Converter slip rotating speed</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid switch valve A</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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KIA Sportage [JE] - Sportage 2.0 CRDi 4x4					
Year	Engine	Liters	HP	System	Functions
2004/09 - 2007/04	D4EA	2.0	113	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
2006/01 - 2007/04	D4EA...	2.0	136 - 140	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Convertor slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
2007/05 - 2010/05	D4EA	2.0	150	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> </ul> </li> </ul>

- Pressure-regulation magnetic valve 3

KIA Sportage [JE] - Sportage 2.0 CRDi					
Year	Engine	Liters	HP	System	Functions
2006/01 - 2007/04	D4EA-V	2.0	136 - 140	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

2007/05 - 2010/05	D4EA	2.0	150	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for ovedrive deactivation</li> <li>- Convertor slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Vehicle driving speed</li> <li>- throttle valve position</li> <li>- Magnetic valve for reverse gear lock</li> <li>- Engine revolution</li> <li>- cruise control switch</li> </ul> </li> </ul>

<p>2005/02 - 2007/04</p>	<p>D4EA</p>	<p>2.0</p>	<p>113</p>	<p>Gear box control 4-gears automatic transmission GS 12</p>	<ul style="list-style-type: none"> <li>- Solenoid switch valve A</li> <li>- Solenoid switch valve B</li> <li>- Solenoid switch valve C</li> <li>- Solenoid switch valve D</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gears engagement control</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Tiptronic switch: identification</li> <li>- Overdrive solenoid valve</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Transmission output speed</li> <li>- Switch for overdrive deactivation</li> <li>- Converter slip rotating speed</li> <li>- Automatic pressure control solenoid A</li> <li>- Automatic pressure control solenoid B</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- AT-air control magnetic valve</li> <li>- Brake tape reduction magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure-regulation magnetic valve 5</li> <li>• <b>Actuators</b></li> <li>- Magnetic valve for reverse gear lock</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Selector lever position indication: 5</li> <li>- Selector lever position indication: 4</li> <li>- Selector lever position indication: 3</li> <li>- Selector lever position indication: 2</li> <li>- Selector lever position indication: 1</li> <li>- Magnetic valve for crawling speed</li> <li>- solenoid brake band</li> <li>- Magnetic valve for cruising gear</li> <li>- Brake tape reduction magnetic valve</li> <li>- Power supply relay gearbox</li> <li>- Pressure-regulation magnetic valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> </ul>
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[Delta \[844\] - Delta 1.4i 16V](#)

[Delta \[844\] - Delta 1.6 JTD](#)

[Delta \[844\] - Delta 1.9 JTD](#)

[Delta \[844\] - Delta 2.0 MJTD](#)

[Delta \[844\] - Delta 1.8 TBi](#)

[Delta \[844\] - Delta 1.4i LPG](#)

[Musa - Musa 1.4 16V](#)

[Musa - Musa 1.3 MJTD](#)

[Musa - Musa 1.9 JTD](#)

[Musa - Musa 1.4](#)

[Musa - Musa 1.3 MJTD 16V](#)

[Musa - Musa 1.6 JTD](#)

[Musa - Musa 1.4 LPG](#)

[Phedra - Phedra 2.0 16V](#)

[Phedra - Phedra 2.0 JTD 16V](#)

[Phedra - Phedra 2.2 JTD 16V](#)

[Phedra - Phedra 3.0 24V](#)

[Thesis - Thesis 2.0 Turbo 20V](#)

[Thesis - Thesis 2.4 20V](#)

[Thesis - Thesis 3.0 V6 24V](#)

[Thesis - Thesis 2.4 JTD 10V](#)

[Thesis - Thesis 3.2 V6 24V](#)

[Thesis - Thesis 2.4 JTD 20V](#)

[Ypsilon \[843\] - Ypsilon 1.4 LPG](#)

[Ypsilon \[843\] - Ypsilon 1.3 Multijet](#)

Year	Engine	Liters	HP	System	Functions
2008/07 -	198 A 4.000	1.4	120	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring <ul style="list-style-type: none"> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> </ul> </li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b></li> <li>- Warning, tyre pressure monitor</li> </ul>
2008/07 - 2010/07	198 A 1.000	1.4	150	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- System test</li> <li>- Check antenna function</li> <li>• <b>Adjustments / settings</b></li> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring</li> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> </ul>

					<ul style="list-style-type: none"> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
2010/08 -		1.4	140	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring <ul style="list-style-type: none"> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> </ul> </li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
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LANCIA					Delta [844] - Delta 1.6 JTD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring</li> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> </ul> </li> </ul>	

2008/07 -	198 A 2.000	1.6	120	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b></li> <li>- Warning, tyre pressure monitor</li> </ul>
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LANCIA					Delta [844] - Delta 1.9 JTD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> </ul>	

2008/08 -	844 A 1.000	1.9	190	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring <ul style="list-style-type: none"> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> </ul> </li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
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Year	Engine	Liters	HP	System	Functions
2008/08 -	198 A 5.000	2.0	165	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring</li> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
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LANCIA					Delta [844] - Delta 1.8 TBI	
Year	Engine	Liters	HP	System	Functions	
2009/05	939B1000	1.8	200	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring</li> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code, sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b></li> <li>- Warning, tyre pressure monitor</li> </ul>
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LANCIA					Delta [844] - Delta 1.4i LPG	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- System test</li> <li>- Check antenna function</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire inflation pressure set value change</li> <li>- Transfer configuration</li> <li>- Pressure sensor adaption check (travelling)</li> <li>- Status change, control unit</li> <li>- Number of registered sensor codes</li> </ul> </li> <li>• <b>Read the event memory</b></li> <li>• <b>Delete the event memory</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply terminal 15</li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Overload protection</li> <li>- Tire pressure monitoring system, status</li> <li>- Tyre inflation monitoring system, pressure monitoring</li> <li>- Fitted tires type</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> </ul> </li> </ul>	

				<p>Tire control system Tire pressure monitor 1.2</p>	<ul style="list-style-type: none"> <li>- Front right sensor code</li> <li>- Ignition key</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Number of monitored wheels</li> <li>- Position/sensor 1</li> <li>- Position/sensor 2</li> <li>- Position/sensor 3</li> <li>- Position/sensor 4</li> <li>- Position/sensor 5</li> <li>- Valve code, sensor 1</li> <li>- Valve code, sensor 2</li> <li>- Valve code, sensor 3</li> <li>- Valve code, sensor 4</li> <li>- Valve code/sensor 5</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- Antenna fault detection</li> <li>- Front axle tire pressure set value/warm</li> <li>- Wheel position 1st alarm triggering</li> <li>- Interference signal</li> <li>- 2nd alarm source</li> <li>- 3rd alarm source</li> <li>- Rear axle tire pressure set value/warm</li> <li>- 1st alarm source</li> <li>- Tire pressure 1st alarm</li> <li>- Wheel position 2nd alarm triggering</li> <li>- Tire pressure 2nd alarm</li> <li>- Wheel position 3rd alarm triggering</li> <li>- Tire pressure 3rd alarm</li> <li>- Remote control signal upper limit</li> <li>- Lower limit remote control signal</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning, tyre pressure monitor</li> </ul> </li> </ul>
<p>2009/12 -</p>	<p>198A4.000</p>	<p>1.4</p>	<p>120</p>	<p>Engine control</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Coolant temperature</li> <li>- Engine revolution</li> <li>- emergency switch off</li> <li>- electric fuel pump</li> <li>- Engine status</li> <li>- Control unit, internal relay</li> <li>- Injection time, cylinder 1</li> <li>- Injection time, cylinder 2</li> <li>- Injection time, cylinder 3</li> <li>- Injection time, cylinder 4</li> <li>- Fuel feeding stop</li> <li>- LPG operation</li> <li>- Petrol operation</li> <li>- Liquefied petroleum gas level warning lamp</li> <li>- Liquefied petroleum gas switch</li> <li>- Gas tank level</li> <li>- Operating time</li> </ul> </li> </ul>

				Landi Renzo LC02	<ul style="list-style-type: none"> <li>- Gas switching waiting time</li> <li>- Gas shut-off valve current input</li> <li>- Control unit temperature</li> <li>- Dry-running operation function</li> <li>- Fuel mode requested</li> <li>- Fuel mode</li> <li>- Current at the fuel pump</li> <li>- Gas rail temperature</li> <li>- Gas rail pressure</li> <li>- Gas shut-off valve</li> <li>- Injection time/cylinder 1</li> <li>- Injection time/cylinder 2</li> <li>- Injection time/cylinder 3</li> <li>- Injection time/cylinder 4</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- emergency switch off</li> <li>- electrical fuel pump relay</li> <li>- Liquefied petroleum gas indicator lamp</li> <li>- Injection valve Cylinder 1</li> <li>- Injection valve Cylinder 2</li> <li>- Injection valve Cylinder 3</li> <li>- Injection valve Cylinder 4</li> <li>- Gas shut-off valve</li> <li>- Operating mode indicator lamp</li> </ul> </li> </ul>
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LANCIA				Musa - Musa 1.4 16V	
Year	Engine	Liters	HP	System	Functions
2004/10 -	843A1000	1.4	95	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul>
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2005/03 -	192B2000	1.4	90	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul> </li> </ul>

LANCIA					Musa - Musa 1.3 MJTD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> </ul> </li> </ul>	

2004/10 -	188A9000	1.3	70	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul>
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

LANCIA				Musa - Musa 1.9 JTD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> </ul> </li> </ul>

2004/10 -	188B2000	1.9	100	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul>
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Injector quantity adjustment</li> <li>- Reset Lambda sensor adaptation values</li> <li>- HFM adaption reset</li> <li>- Rail pressure sensor adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel filter warming</li> <li>- Vehicle driving speed</li> <li>- Engine oil pressure</li> <li>- Coolant temperature sensor voltage</li> <li>- throttle valve position</li> <li>- Fuel pump relay</li> <li>- Engine control unit</li> <li>- fuel temperature sensor</li> <li>- Engine revolution</li> <li>- cruise control switch</li> <li>- Lights switch 2</li> <li>- valve, exhausted gases recirculation</li> <li>- Immobilizer</li> <li>- system power supply</li> <li>- Exceeding the max revolution</li> <li>- turbo charger regulating valve</li> <li>- air conditioner compressor relay</li> <li>- Coolant temperature sensor</li> <li>- Rail pressure, nominal</li> <li>- Rail pressure, actual</li> <li>- Air mass, nominal value</li> <li>- Air mass, actual value</li> <li>- Turbo pressure, nominal value</li> <li>- Turbo pressure, actual value</li> <li>- Acceleration pedal position sensor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>

				<p>Engine control Diesel CR/EDC 16C9</p> <ul style="list-style-type: none"> <li>- Clutch pedal switch</li> <li>- Start permission</li> <li>- Gas pedal position sensor 1 Voltage</li> <li>- Gas pedal position sensor 2 Voltage</li> <li>- Odometer</li> <li>- Air conditioner status</li> <li>- Tempomat speed (required value)</li> <li>- Cooling agent pressure</li> <li>- Glow plugs control</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Atmospheric pressure voltage sensor</li> <li>- Charging-air pressure sensor voltage</li> <li>- Number of electronic control unit programming</li> <li>- Atmospheric pressure sensor</li> <li>- Cruise control button "Resume"</li> <li>- Cruise control system</li> <li>- Overspeed frequency</li> <li>- Overspeed duration</li> <li>- Injected quantity (total)</li> <li>- Ingested air temperature sensor 1</li> <li>- Intake-air temperature sensor 2</li> <li>- Fuel quantity control valve</li> <li>- Water in fuel</li> <li>- Km reading at the last programming</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel filter warming</li> <li>- Fuel pump relay</li> <li>- valve, exhausted gases recirculation</li> <li>- Warming up control lamp</li> <li>- Air conditioner relay</li> <li>- Radiator fan stage 1</li> <li>- Radiator fan stage 2</li> <li>- Glow relay 1</li> <li>- Engine management system error lights</li> <li>- Oil pressure control light</li> <li>- Cooling agent temperature warning light</li> <li>- Speed control light</li> <li>- Throttle valves magnetic valve</li> <li>- Fuel water content light</li> <li>- Turbocharger control motor</li> <li>- Fuel metering block</li> </ul> </li> </ul>
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LANCIA					Musa - Musa 1.4	
Year	Engine	Liters	HP	System	Functions	
2005/03				Tire control system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> </ul> </li> </ul>	



-	350A1000	1.4	75	Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul>
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LANCIA				Musa - Musa 1.3 MJTD 16V	
Year	Engine	Liters	HP	System	Functions
				Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2006/01	199A3000	1.3	90		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Throttle valve test</li> <li>- Quantities comparison</li> <li>- Glow plug test</li> <li>- Exhaust gas recirculation system test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Injector quantity adjustment</li> <li>- Reset Lambda sensor adaptation values</li> <li>- HFM adaption reset</li> <li>- Rail pressure sensor adjustment</li> <li>- Differential pressure sensor adjustment</li> <li>- Neutral position initialization</li> <li>- Reset after replacement of additive filter</li> <li>- Turbocharger basic setting</li> <li>- Reset mileage with coolant temp. warnng light ON</li> <li>- Reset mileage with fuel water cont. lamp ON</li> <li>- Reset A/C /cruise control parameters</li> <li>- Reset after speed trigger wheel replacement</li> <li>- Reset after wastegate valve replacement</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Diesel particulate filter regeneration run</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Oil quality</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Mileage</li> <li>- throttle valve position</li> <li>- Fuel temperature</li> <li>- Coolant temperature</li> <li>- Engine control unit</li> <li>- Engine revolution</li> <li>- atmospheric pressure</li> <li>- Exhausted gases recirculation</li> <li>- Lights switch 2</li> <li>- Exceeding the max revolution</li> <li>- Rail pressure, nominal</li> <li>- Rail pressure, actual</li> <li>- Air mass, nominal value</li> <li>- Air mass, actual value</li> <li>- Turbo pressure, nominal value</li> <li>- Turbo pressure, actual value</li> <li>- Starter activation</li> <li>- Acceleration pedal position sensor 1</li> <li>- Acceleration pedal position sensor 2</li> <li>- Fuel quantity metering device pulse-duty factor</li> <li>- Start permission</li> <li>- Throttle valve required position</li> <li>- Air conditioner status</li> <li>- Gear box transmission identification</li> <li>- Last oil change</li> <li>- Cooling agent pressure</li> <li>- Cooling agent compressor</li> <li>- Brake pedal</li> </ul> </li> </ul>

Engine control  
Diesel EDC 8DF CF5

- Throttle actuator
- Final intake temperature
- EGR cooling bypass solenoid valve
- Mileage since temperature indicator lamp on
- Mileage since fuel water content lamp on
- Mileage with DPF indicator lamp ON
- Clutch pedal stop
- Start/stop release by Central electronics
- Start/stop function
- Start/stop function status
- Start/stop activation prohibition
- Brake booster switch
- Duty cycle load pressure control
- Number of electronic control unit programming
- Fuel pump relay
- Clutch pedal
- Electronic control unit replacement required
- Wastegate valve opening counter
- Wastegate valve opening time
- Speed control signal
- Neutral position
- Overspeed frequency
- Overspeed duration
- Injected quantity (total)
- Status particle filter
- Glow plug actuation
- Operating switch speed
- Particle filter differential pressure
- Oxygen concentration
- Average time last 5 regenerations
- Average range of the last 5 regenerations
- Average range of the last 5 regenerations
- Particle filter temperature
- Km reading at the last programming
- km from the last DPF regeneration
- Particle filter, saturation
- Intake air initial temperature
- Kilometer reading from the last DPF replacement
- Var.turb.geom. turbocharger, specified position
- Partial regeneration operations count
- Mileage on lubrication service warning
- Mileage on last overspeed
- Number of regeneration requests
- VTG turbocharger actual position
- **Actuators**
  - Fuel pump relay
  - valve, exhausted gases recirculation
  - Radiator fan. stage 1
  - Radiator fan. stage 2
  - Suction control valve
  - Engine management system error lights
  - Oil pressure control light
  - Charging-air pressure magnetic valve
  - Cooling agent temperature warning light
  - Speed control light
  - Fuel water content light
  - Glow control light
  - Cooling agent compressor
  - Particle filter control light

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Program sensor code (activator)
- **Error memory**
- **Current values**
  - Tire pressure monitoring system, status
  - Pressure sensor status, front left

	<p>Tire control system Tire pressure monitor 1.1</p>	<ul style="list-style-type: none"> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul>
	<p>Parking assisting system Park Distance Control 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Throttle valve test</li> <li>- Quantities comparison</li> <li>- Glow plug test</li> <li>- Exhaust gas recirculation system test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Injector quantity adjustment</li> <li>- Reset Lambda sensor adaptation values</li> <li>- HFM adaption reset</li> <li>- Rail pressure sensor adjustment</li> <li>- Differential pressure sensor adjustment</li> <li>- Neutral position initialization</li> <li>- Reset after replacement of additive filter</li> <li>- Turbocharger basic setting</li> <li>- Reset mileage with coolant temp. warnng light ON</li> <li>- Reset mileage with fuel water cont. lamp ON</li> <li>- Reset A/C /cruise control parameters</li> <li>- Reset after speed trigger wheel replacement</li> <li>- Reset after wastegate valve replacement</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Diesel particulate filter regeneration run</li> </ul> </li> </ul>

2010/02

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Engine control  
Diesel EDC 8DF CF5

• **Error memory**

• **Current values**

- Power supply
- Oil quality
- Vehicle driving speed
- Accelerator pedal position
- Mileage
- throttle valve position
- Fuel temperature
- Coolant temperature
- Engine control unit
- Engine revolution
- atmospheric pressure
- Exhausted gases recirculation
- Lights switch 2
- Exceeding the max revolution
- Rail pressure, nominal
- Rail pressure, actual
- Air mass, nominal value
- Air mass, actual value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Starter activation
- Acceleration pedal position sensor 1
- Acceleration pedal position sensor 2
- Fuel quantity metering device pulse-duty factor
- Start permission
- Throttle valve required position
- Air conditioner status
- Gear box transmission identification
- Last oil change
- Cooling agent pressure
- Cooling agent compressor
- Brake pedal
- Throttle actuator
- Final intake temperature
- EGR cooling bypass solenoid valve
- Mileage since temperature indicator lamp on
- Mileage since fuel water content lamp on
- Mileage with DPF indicator lamp ON
- Clutch pedal stop
- Start/stop release by Central electronics
- Start/stop function
- Start/stop function status
- Start/stop activation prohibition
- Brake booster switch
- Duty cycle load pressure control
- Number of electronic control unit programming
- Fuel pump relay
- Clutch pedal
- Electronic control unit replacement required
- Wastegate valve opening counter
- Wastegate valve opening time
- Speed control signal
- Neutral position
- Overspeed frequency
- Overspeed duration
- Injected quantity (total)
- Status particle filter
- Glow plug actuation
- Operating switch speed
- Particle filter differential pressure
- Oxygen concentration
- Average time last 5 regenerations
- Average range of the last 5 regenerations
- Average range of the last 5 regenerations
- Particle filter temperature
- Km reading at the last programming

					<ul style="list-style-type: none"> <li>- km from the last DPF regeneration</li> <li>- Particle filter, saturation</li> <li>- Intake air initial temperature</li> <li>- Kilometer reading from the last DPF replacement</li> <li>- Var.turb.geom. turbocharger, specified position</li> <li>- Partial regeneration operations count</li> <li>- Mileage on lubrication service warning</li> <li>- Mileage on last overspeed</li> <li>- Number of regeneration requests</li> <li>- VTG turbocharger actual position</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- valve, exhausted gases recirculation</li> <li>- Radiator fan. stage 1</li> <li>- Radiator fan. stage 2</li> <li>- Suction control valve</li> <li>- Engine management system error lights</li> <li>- Oil pressure control light</li> <li>- Charging-air pressure magnetic valve</li> <li>- Cooling agent temperature warning light</li> <li>- Speed control light</li> <li>- Fuel water content light</li> <li>- Glow control light</li> <li>- Cooling agent compressor</li> <li>- Particle filter control light</li> </ul>
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LANCIA					Musa - Musa 1.6 JTD	
Year	Engine	Liters	HP	System	Functions	
2007/10 -	350A2000	1.6	120	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul>
2008/09	350 A3.000	1.6	115	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

LANCIA				Musa - Musa 1.4 LPG	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Program sensor code (activator)</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

2009/03 -	350A1000	1.4	78	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> <li>- Tire pressure monitoring system, status</li> <li>- Pressure sensor status, front left</li> <li>- Pressure sensor status, front right</li> <li>- Pressure sensor status, rear left</li> <li>- Pressure sensor status, rear right</li> <li>- Rear left tire temperature</li> <li>- Rear right tire temperature</li> <li>- Front left tire temperature</li> <li>- Front right tire temperature</li> <li>- Rear left sensor code</li> <li>- Rear right sensor code</li> <li>- Front left sensor code</li> <li>- Front right sensor code</li> <li>- Tire pressure, rear right</li> <li>- Tire pressure, rear left</li> <li>- Tire pressure, front left</li> <li>- Tire pressure, front right</li> <li>- Front left tire pressure sensor code</li> <li>- Front right tire pressure sensor code</li> <li>- Rear left tire pressure sensor code</li> <li>- Rear right tire pressure sensor code</li> <li>- Remote control signal</li> <li>- Front left wheel status</li> <li>- Front right wheel status</li> <li>- Rear left wheel status</li> <li>- Rear right wheel status</li> <li>- Warn. thresh.: Infl. press. too low</li> <li>- Maximum temperature</li> <li>- Tire temperature sensor 1</li> <li>- Tire temperature sensor 2</li> <li>- Tire temperature sensor 3</li> <li>- Tire temperature sensor 4</li> <li>- Front axle tire pressure set value</li> <li>- Rear axle tire pressure set value</li> </ul>
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Coolant temperature</li> <li>- Engine revolution</li> <li>- emergency switch off</li> <li>- electric fuel pump</li> <li>- Engine status</li> <li>- Control unit, internal relay</li> <li>- Injection time, cylinder 1</li> <li>- Injection time, cylinder 2</li> <li>- Injection time, cylinder 3</li> <li>- Injection time, cylinder 4</li> <li>- Fuel feeding stop</li> <li>- LPG operation</li> <li>- Petrol operation</li> <li>- Liquefied petroleum gas level warning lamp</li> <li>- Liquefied petroleum gas switch</li> </ul> </li> </ul>



				Engine control Landi Renzo LC02	<ul style="list-style-type: none"> <li>- Gas tank level</li> <li>- Operating time</li> <li>- Gas switching waiting time</li> <li>- Gas shut-off valve current input</li> <li>- Control unit temperature</li> <li>- Dry-running operation function</li> <li>- Fuel mode requested</li> <li>- Fuel mode</li> <li>- Current at the fuel pump</li> <li>- Gas rail temperature</li> <li>- Gas rail pressure</li> <li>- Gas shut-off valve</li> <li>- Injection time/cylinder 1</li> <li>- Injection time/cylinder 2</li> <li>- Injection time/cylinder 3</li> <li>- Injection time/cylinder 4</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- emergency switch off</li> <li>- electrical fuel pump relay</li> <li>- Liquefied petroleum gas indicator lamp</li> <li>- Injection valve Cylinder 1</li> <li>- Injection valve Cylinder 2</li> <li>- Injection valve Cylinder 3</li> <li>- Injection valve Cylinder 4</li> <li>- Gas shut-off valve</li> <li>- Operating mode indicator lamp</li> </ul> </li> </ul>
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LANCIA Phedra - Phedra 2.0 16V					
Year	Engine	Liters	HP	System	Functions
2002/09 - 2005/09	RFN	2.0	136	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

LANCIA Phedra - Phedra 2.0 JTD 16V					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> </ul> </li> </ul>

2002/09 - 2006/03	RHW	2.0	110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
2002/09 - 2006/02	RHM	2.0	110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
2006/03 - 2010/12	RHK	2.0	120	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
					<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p>

2006/10 - 2010/12	RHR	2.0	136	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b></li> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
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LANCIA Phedra - Phedra 2.2 JTD 16V					
Year	Engine	Liters	HP	System	Functions
2002/09 - 2007/09	4HW	2.2	130	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b></li> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
2007/10 - 2010/12	4HT	2.2	170	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b></li> <li>- Detonation unit warming plug</li> </ul>

					<ul style="list-style-type: none"> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
2008/03 - 2010/12	4H01	2.2	170	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

LANCIA Phedra - Phedra 3.0 24V					
Year	Engine	Liters	HP	System	Functions
2002/09 - 2005/09	XFW	3.0	204	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

LANCIA Thesis - Thesis 2.0 Turbo 20V					
Year	Engine	Liters	HP	System	Functions
2002/04					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

- 2009/12	841E.000	2.0	185	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul>
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LANCIA Thesis - Thesis 2.4 20V					
Year	Engine	Liters	HP	System	Functions
2002/04 - 2009/12	841D.000	2.4	170	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

LANCIA Thesis - Thesis 3.0 V6 24V					
Year	Engine	Liters	HP	System	Functions
2002/04 - 2003/07	841A.000	3.0	215	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

LANCIA Thesis - Thesis 2.4 JTD 10V					
Year	Engine	Liters	HP	System	Functions
2002/04 - 2005/02	841C.000	2.4	150	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

LANCIA Thesis - Thesis 3.2 V6 24V					
Year	Engine	Liters	HP	System	Functions
2003/08 - 2009/12	841A.000	3.2	230	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Trailer operation</li> <li>- System</li> </ul>
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LANCIA Thesis - Thesis 2.4 JTD 20V					
Year	Engine	Liters	HP	System	Functions
2003/06 - 2006/02	841H.000	2.4	175	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>
2006/03 - 2009/12	841P.000	2.4	185	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- The ambient temperature</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- System</li> </ul> </li> </ul>

LANCIA Ypsilon [843] - Ypsilon 1.4 LPG					
Year	Engine	Liters	HP	System	Functions
2009/03 - 2011/11	350 A1.000	1.4	75	Engine control Landi Renzo LC02	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Coolant temperature</li> <li>- Engine revolution</li> <li>- emergency switch off</li> <li>- electric fuel pump</li> <li>- Engine status</li> <li>- Control unit, internal relay</li> <li>- Injection time, cylinder 1</li> <li>- Injection time, cylinder 2</li> <li>- Injection time, cylinder 3</li> <li>- Injection time, cylinder 4</li> <li>- Fuel feeding stop</li> <li>- LPG operation</li> <li>- Petrol operation</li> <li>- Liquefied petroleum gas level warning lamp</li> <li>- Liquefied petroleum gas switch</li> <li>- Gas tank level</li> <li>- Operating time</li> <li>- Gas switching waiting time</li> <li>- Gas shut-off valve current input</li> <li>- Control unit temperature</li> <li>- Dry-running operation function</li> <li>- Fuel mode requested</li> <li>- Fuel mode</li> <li>- Current at the fuel pump</li> <li>- Gas rail temperature</li> <li>- Gas rail pressure</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Gas shut-off valve</li> <li>- Injection time/cylinder 1</li> <li>- Injection time/cylinder 2</li> <li>- Injection time/cylinder 3</li> <li>- Injection time/cylinder 4</li> <li>• <b>Actuators</b></li> <li>- emergency switch off</li> <li>- electrical fuel pump relay</li> <li>- Liquefied petroleum gas indicator lamp</li> <li>- Injection valve Cylinder 1</li> <li>- Injection valve Cylinder 2</li> <li>- Injection valve Cylinder 3</li> <li>- Injection valve Cylinder 4</li> <li>- Gas shut-off valve</li> <li>- Operating mode indicator lamp</li> </ul>
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LANCIA					
Ypsilon [843] - Ypsilon 1.3 Multijet					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Throttle valve test</li> <li>- Quantities comparison</li> <li>- Glow plug test</li> <li>- Exhaust gas recirculation system test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Injector quantity adjustment</li> <li>- Reset Lambda sensor adaptation values</li> <li>- HFM adaption reset</li> <li>- Rail pressure sensor adjustment</li> <li>- Differential pressure sensor adjustment</li> <li>- Neutral position initialization</li> <li>- Reset after replacement of additive filter</li> <li>- Turbocharger basic setting</li> <li>- Reset mileage with coolant temp. warnng light ON</li> <li>- Reset mileage with fuel water cont. lamp ON</li> <li>- Reset A/C /cruise control parameters</li> <li>- Reset after speed trigger wheel replacement</li> <li>- Reset after wastegate valve replacement</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Diesel particulate filter regeneration run</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Oil quality</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Mileage</li> <li>- throttle valve position</li> <li>- Fuel temperature</li> <li>- Coolant temperature</li> <li>- Engine control unit</li> <li>- Engine revolution</li> <li>- atmospheric pressure</li> <li>- Exhausted gases recirculation</li> <li>- Lights switch 2</li> <li>- Exceeding the max revolution</li> <li>- Rail pressure, nominal</li> <li>- Rail pressure, actual</li> <li>- Air mass, nominal value</li> <li>- Air mass, actual value</li> <li>- Turbo pressure, nominal value</li> <li>- Turbo pressure, actual value</li> <li>- Starter activation</li> </ul> </li> </ul>

2009/09 - 2010/11	199 A2.000	1.3	75	<p>Engine control Diesel EDC 8DF CF5</p>	<ul style="list-style-type: none"> <li>- Acceleration pedal position sensor 1</li> <li>- Acceleration pedal position sensor 2</li> <li>- Fuel quantity metering device pulse-duty factor</li> <li>- Start permission</li> <li>- Throttle valve required position</li> <li>- Air conditioner status</li> <li>- Gear box transmission identification</li> <li>- Last oil change</li> <li>- Cooling agent pressure</li> <li>- Cooling agent compressor</li> <li>- Brake pedal</li> <li>- Throttle actuator</li> <li>- Final intake temperature</li> <li>- EGR cooling bypass solenoid valve</li> <li>- Mileage since temperature indicator lamp on</li> <li>- Mileage since fuel water content lamp on</li> <li>- Mileage with DPF indicator lamp ON</li> <li>- Clutch pedal stop</li> <li>- Start/stop release by Central electronics</li> <li>- Start/stop function</li> <li>- Start/stop function status</li> <li>- Start/stop activation prohibition</li> <li>- Brake booster switch</li> <li>- Duty cycle load pressure control</li> <li>- Number of electronic control unit programming</li> <li>- Fuel pump relay</li> <li>- Clutch pedal</li> <li>- Electronic control unit replacement required</li> <li>- Wastegate valve opening counter</li> <li>- Wastegate valve opening time</li> <li>- Speed control signal</li> <li>- Neutral position</li> <li>- Overspeed frequency</li> <li>- Overspeed duration</li> <li>- Injected quantity (total)</li> <li>- Status particle filter</li> <li>- Glow plug actuation</li> <li>- Operating switch speed</li> <li>- Particle filter differential pressure</li> <li>- Oxygen concentration</li> <li>- Average time last 5 regenerations</li> <li>- Average range of the last 5 regenerations</li> <li>- Average range of the last 5 regenerations</li> <li>- Particle filter temperature</li> <li>- Km reading at the last programming</li> <li>- km from the last DPF regeneration</li> <li>- Particle filter, saturation</li> <li>- Intake air initial temperature</li> <li>- Kilometer reading from the last DPF replacement</li> <li>- Var.turb.geom. turbocharger, specified position</li> <li>- Partial regeneration operations count</li> <li>- Mileage on lubrication service warning</li> <li>- Mileage on last overspeed</li> <li>- Number of regeneration requests</li> <li>- VTG turbocharger actual position</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- valve, exhausted gases recirculation</li> <li>- Radiator fan. stage 1</li> <li>- Radiator fan. stage 2</li> <li>- Suction control valve</li> <li>- Engine management system error lights</li> <li>- Oil pressure control light</li> <li>- Charging-air pressure magnetic valve</li> <li>- Cooling agent temperature warning light</li> <li>- Speed control light</li> <li>- Fuel water content light</li> <li>- Glow control light</li> </ul> </li> </ul>
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- Cooling agent compressor
- Particle filter control light

[ES - ES 300 3.0i](#)

[ES - ES 330 3.3i](#)

[ES - ES330 3.3](#)

[ES - ES 300 3.0](#)

[GS - GS 400 4.0i](#)

[GS - GS 430 4.3](#)

[GS - GS 300 3.0](#)

[GS \[S1\] - GS 300 3.0i](#)

[GS \[S1\] - GS 430 4.3i](#)

[GS \[S1\] - GS 430 4.3](#)

[GS \[S1\] - GS 300 3.0](#)

[GX \[J1\] - GX 470 4.7 4x4](#)

[IS \[E1\] - IS 200 2.0i Wagon](#)

[IS \[E1\] - IS 300 3.0i Wagon](#)

[IS \[E1\] - IS 300 3.0i](#)

[IS \[E1\] - IS 200 2.0i](#)

[IS \[E2\] - IS 220d 2.2](#)

[LFA - LFA 4.8i](#)

[LS \[F1\] - LS 400 4.0i](#)

[LS \[F2\] - LS 400 4.0i](#)

[LS \[F3\] - LS 430 4.3i](#)

[LX - LX 450 4.5 4x4](#)

[LX \[J1\] - LX 470 4.7 4x4](#)

[RX - RX 330 3.3 4x4](#)

[RX \[L1\] - RX 270 2.7i](#)

[RX \[U1\] - RX 300 3.0 4x4](#)

[RX \[U3\] - RX 300 3.0i 4x4](#)

[SC - SC 300 3.0i Coupe](#)

[SC - SC 400 4.0i Coupe](#)

[SC - SC 430 4.3i Coupe](#)

[SC - SC 400 4.0 Coupe](#)

[SC \[Z4\] - SC 430 4.3 Cabrio](#)

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring

1996/08 - 2001/07	1MZFE	3.0	203	<ul style="list-style-type: none"> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

factor) 2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)

- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump

				<ul style="list-style-type: none"> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> </ul> </li> </ul>



Engine control  
TCCS II V3

- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring

					<ul style="list-style-type: none"> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
<p>2001/07 - 2003/07</p>	<p>1MZFE</p>	<p>3.0</p>	<p>215</p>		<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> </ul> </li> </ul>

- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

Gear box control  
Transmission control ECT 2.2

- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve

				<ul style="list-style-type: none"> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> </ul> </li> </ul>

<p>1992/03 - 1996/08</p>	<p>3VZFE</p>	<p>3.0</p>	<p>188</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> </ul>
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- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test

- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode



1991/07  
-  
1993/08

3VZFE

3.0

190

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay

					<ul style="list-style-type: none"> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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LEXUS					ES - ES 330 3.3i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)

- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve

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				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring

					<ul style="list-style-type: none"> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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LEXUS					ES - ES330 3.3	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> </ul> </li> </ul>	

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the



Engine control  
TCCS II V3

system

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact

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- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position

Gear box control  
Transmission control ECT 2.2

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

1995/09 - 2003/08	1MZFE	3.0	215	<ul style="list-style-type: none"> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor



2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump

					<ul style="list-style-type: none"> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>LEXUS</b>	<b>GS - GS 400 4.0i</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

1997/08 - 2000/07	1UZFE	4.0	284	<ul style="list-style-type: none"> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b></li> </ul>				

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean

Gear box control  
Transmission control ECT 2.2

- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil

					<ul style="list-style-type: none"> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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LEXUS					GS - GS 430 4.3	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> </ul> </li> </ul>	

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Engine control  
TCCS II V3

- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal



- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation

					<ul style="list-style-type: none"> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>LEXUS</b>	<b>GS - GS 300 3.0</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

1992/09 - 1995/08	2JZGE	3.0	220	<ul style="list-style-type: none"> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> </ul> </li> </ul>

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

Gear box control  
Transmission control ECT 2.2

- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve

				<ul style="list-style-type: none"> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS



				<ul style="list-style-type: none"> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
1995/09 - 1998/08	2JZGE	3.0	0	<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> </ul>

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

Gear box control  
Transmission control ECT 2.2

- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve

					<ul style="list-style-type: none"> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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LEXUS					GS [S1] - GS 300 3.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)

- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1

1997/08 - 2005/01	2JZGE	3.0	222 - 228	<ul style="list-style-type: none"> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1



				<ul style="list-style-type: none"> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> </ul> </li> </ul>

<p>1993/03 - 1997/08</p>	<p>2JZGE</p>	<p>3.0</p>	<p>219</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> </ul>
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- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve

					<ul style="list-style-type: none"> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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LEXUS					
GS [S1] - GS 430 4.3i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD

					<ul style="list-style-type: none"> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
<p>2000/07 - 2007/01</p>	<p>3UZFE</p>	<p>4.3</p>	<p>283</p>		<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b></li> </ul>

- Adaptive parameters reset
- Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode
  - Oxygen sensor (bank 2, sensor 1) Lambda actual value

Gear box control  
Transmission control ECT 2.2

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system



					<ul style="list-style-type: none"> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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LEXUS					GS [S1] - GS 430 4.3	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> </ul> </li> </ul>	

2005/01 - 2008/09	3UZFE	4.3	283	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for ovedrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> </ul>
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- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

					<ul style="list-style-type: none"> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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LEXUS					GS [S1] - GS 300 3.0	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring

2005/01 - 2011/12	3GRFSE	3.0	249	<ul style="list-style-type: none"> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> </ul> </li> </ul>

- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

Gear box control  
Transmission control ECT 2.2

- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve



					<ul style="list-style-type: none"> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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LEXUS				GX [J1] - GX 470 4.7 4x4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)

- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

2002/11 -	2UZFE	4.7	234	<ul style="list-style-type: none"> <li>- Ingestion control valve</li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> </ul> </li> </ul>
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Gear box control  
Transmission control ECT 2.2

- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

					<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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LEXUS					IS [E1] - IS 200 2.0i Wagon	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda</li> </ul>	

Engine control  
TCCS II V3

- factor) 1
  - regulation factor fuel mixture content (lambda
- factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode
  - Oxygen sensor (bank 2, sensor 1) Lambda
- actual value
  - Lambda sensor (B1,S1) Lambda actual value
  - LS (b1, s1) switch time rich to lean
  - LS (b2, s1) switch time rich to lean
  - LS (b1, s1) switch time lean to rich
  - LS (b2, s1) switch time lean to rich
  - Tank ventilation system: vapour pressure in the
- system
  - Throttle valve closing duty cycle
  - LS (b1,s2) switch time rich to lean
  - LS (b2,s2) switch time rich to lean
  - Oxygen sensor monitoring
  - Lean sensor current(bank 1,sensor 1)
  - Lean sensor current(bank 1,sensor 2)
  - Lean sensor mixture correction (B1,S1)
  - Lean sensor mixture correction (B1,S2)
  - Lambda control/Lambda sensor (B1,S2)

- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve



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- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation

Gear box control  
Transmission control ECT 2.2

- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring

					<ul style="list-style-type: none"> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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LEXUS					IS [E1] - IS 300 3.0i Wagon	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b></li> </ul>	

- Adaptive parameters reset
- Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode
  - Oxygen sensor (bank 2, sensor 1) Lambda actual value

Engine control  
TCCS II V3

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system

2001/07 - 2005/07	2JZGE	3.0	214	<ul style="list-style-type: none"> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> </ul> </li> </ul>				

Gear box control  
Transmission control ECT 2.2

- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)

- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor



					<ul style="list-style-type: none"> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>LEXUS</b>	<b>IS [E1] - IS 300 3.0i</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring

2001/07 - 2005/07	2JZGE	3.0	214	<ul style="list-style-type: none"> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control

					<ul style="list-style-type: none"> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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LEXUS					IS [E1] - IS 200 2.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> </ul> </li> </ul>	

<p>1999/01 - 2005/07</p>	<p>1GFE</p>	<p>2.0</p>	<p>155</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> </ul>
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					<ul style="list-style-type: none"> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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LEXUS					IS [E2] - IS 220d 2.2	
Year	Engine	Liters	HP	System	Functions	



**• Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

**• Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

**• Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

2005/11

2ADFHV

2.2

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Gear box control  
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode

			<ul style="list-style-type: none"> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> </ul> </li> </ul>

2010/08 -	2ADFTV	2.2	150	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> </ul>
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- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

					<ul style="list-style-type: none"> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>LEXUS</b>	<b>LFA - LFA 4.8i</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> </ul> </li> </ul>

2010/12 -	1LRGUE	4.8	560	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> </ul>
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					<ul style="list-style-type: none"> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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LEXUS					LS [F1] - LS 400 4.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> </ul>	



**• Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

1989/12 - 1994/09	1UZFE	4.0	252	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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LEXUS					LS [F2] - LS 400 4.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1

1997/09 - 2000/08	1UZFE	4.0	276 - 284	<ul style="list-style-type: none"> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

				<ul style="list-style-type: none"> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda</li> </ul> </li> </ul>



Engine control  
TCCS II V3

- factor) 1
  - regulation factor fuel mixture content (lambda
- factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode
  - Oxygen sensor (bank 2, sensor 1) Lambda
- actual value
  - Lambda sensor (B1,S1) Lambda actual value
  - LS (b1, s1) switch time rich to lean
  - LS (b2, s1) switch time rich to lean
  - LS (b1, s1) switch time lean to rich
  - LS (b2, s1) switch time lean to rich
  - Tank ventilation system: vapour pressure in the
- system
  - Throttle valve closing duty cycle
  - LS (b1,s2) switch time rich to lean
  - LS (b2,s2) switch time rich to lean
  - Oxygen sensor monitoring
  - Lean sensor current(bank 1,sensor 1)
  - Lean sensor current(bank 1,sensor 2)
  - Lean sensor mixture correction (B1,S1)
  - Lean sensor mixture correction (B1,S2)
  - Lambda control/Lambda sensor (B1,S2)

- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve

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- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation

Gear box control  
Transmission control ECT 2.2

- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring

				<ul style="list-style-type: none"> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> </ul> </li> </ul>

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

1994/10 - 1997/09	1UZFE	4.0	252	Gear box control Transmission control ECT 2.2	<p>system</p> <ul style="list-style-type: none"> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> </ul>
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				<ul style="list-style-type: none"> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> </ul> </li> </ul>



<p>1994/10 - 1997/07</p>	<p>1UZFE</p>	<p>4.0</p>	<p>264</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> </ul>
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- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for ovedrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply

2000/08 - 2006/08	3UZFE	4.3	283	<ul style="list-style-type: none"> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> </ul> </li> </ul>
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Gear box control  
Transmission control ECT 2.2

- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve

					<ul style="list-style-type: none"> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>LEXUS</b>	<b>LX - LX 450 4.5 4x4</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> </ul> </li> </ul>



Engine control  
TCCS II V3

- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control

1995/11 - 1998/01	1FZFE	4.5	215	<ul style="list-style-type: none"> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> </ul> </li> </ul>				

- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

Gear box control  
Transmission control ECT 2.2

- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM

					<ul style="list-style-type: none"> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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LEXUS					LX [J1] - LX 470 4.7 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve

- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve

1998/01 - 2007/08	2UZFE	4.7	234	<ul style="list-style-type: none"> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> </ul> </li> </ul>



Gear box control  
Transmission control ECT 2.2

- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring

					<ul style="list-style-type: none"> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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LEXUS					RX - RX 330 3.3 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> </ul> </li> </ul>	

Engine control

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

TCCS II V3

- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve

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- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode

Gear box control  
Transmission control ECT 2.2

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

				<ul style="list-style-type: none"> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b></li> </ul>

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean



Engine control  
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- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil

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- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve

Gear box control  
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)

- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status

					<ul style="list-style-type: none"> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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LEXUS				RX [U1] - RX 300 3.0 4x4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> </ul> </li> </ul>

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)



Engine control  
TCCS II V3

- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve

1998/01 - 2003/02	1MZFE	3.0	223	<ul style="list-style-type: none"> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS

				<ul style="list-style-type: none"> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> </ul>

**• Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

Engine control  
TCCS II V3

- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve

2000/07 - 2003/02	1MZFE	3.0	201	<ul style="list-style-type: none"> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)



- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

- Ingestion control valve

LEXUS

RX [U3] - RX 300 3.0i 4x4

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"><li>• <b>Functional tests</b><ul style="list-style-type: none"><li>- Diagnosis/electronics test</li><li>- Gear selection</li><li>- Evaporative emission control system leak test</li><li>- Injected quantity</li></ul></li><li>• <b>Adjustments / settings</b><ul style="list-style-type: none"><li>- Adaptive parameters reset</li><li>- Write vehicle identification number (VIN)</li></ul></li><li>• <b>Current values</b><ul style="list-style-type: none"><li>- Short-term AFR correction B2</li><li>- Long-term AFR correction B2</li><li>- Solenoid valve, swirl control</li><li>- Sol. valve, variable intake system</li><li>- Contact idle</li><li>- Regulator idle mode: pulse-duty factor</li><li>- kick-down switch</li><li>- circuit compressor control</li><li>- Winter switch</li><li>- EGR valve - system</li><li>- Oxygen sensor 1</li><li>- Oxygen sensor 2</li><li>- regulation factor fuel mixture content (lambda factor) 1</li><li>- regulation factor fuel mixture content (lambda factor) 2</li><li>- electric fuel pump</li><li>- exhausted gases pressure regul. valve</li><li>- fuel system - bank 1</li><li>- fuel system - bank 2</li><li>- Adjust. revolutions idle</li><li>- Oil</li><li>- Canister valve active carbon filter</li><li>- Direct transmission Converter lockup</li><li>- Tiptronic switch: lower gear engagement</li><li>- Tiptronic switch: upper gear engagement</li><li>- Air mass, actual value</li><li>- exhausted gases recirculation control</li><li>- secondary air switch. valve</li><li>- Solenoid valve: switch. intake manifold 1</li><li>- Solenoid valve: switch. intake manifold 1</li><li>- EGR-magnetic valve step position</li><li>- Ventilation solenoid valve</li><li>- Lambda-control (bank 2, sensor 2)</li><li>- Current gear</li><li>- Lambda controller Lambda probe (B1,S1)</li><li>- Lambda controller Lambda probe (B2,S1)</li><li>- Charging-air pressure magnetic valve</li><li>- Secondary system in limp-home mode</li><li>- Exhaust pipe bypass solenoid valve</li><li>- Overdrive deactivation solen. valve</li><li>- Switch for overdrive deactivation</li><li>- Secondary air system status</li><li>- Idle actuator, position</li><li>- Engine stop request</li><li>- intake manifold pressure</li><li>- Oxygen sensor value (bank 1, sensor 3)</li><li>- Oxygen sensor value (bank 1, sensor 4)</li><li>- Oxygen sensor value (bank 2, sensor 3)</li><li>- Oxygen sensor value (bank 2, sensor 4)</li><li>- Lambda regulation (bank 1, sensor 2)</li><li>- Air compressor switch off</li></ul></li></ul>

Engine control  
TCCS II V3

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

2003/02 - 2006/01	1MZFE	3.0	204	<ul style="list-style-type: none"> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda)</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- factor) 1
  - regulation factor fuel mixture content (lambda
- factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode
  - Oxygen sensor (bank 2, sensor 1) Lambda
- actual value
  - Lambda sensor (B1,S1) Lambda actual value
  - LS (b1, s1) switch time rich to lean
  - LS (b2, s1) switch time rich to lean
  - LS (b1, s1) switch time lean to rich
  - LS (b2, s1) switch time lean to rich
  - Tank ventilation system: vapour pressure in the
- system
  - Throttle valve closing duty cycle
  - LS (b1,s2) switch time rich to lean
  - LS (b2,s2) switch time rich to lean
  - Oxygen sensor monitoring
  - Lean sensor current(bank 1,sensor 1)
  - Lean sensor current(bank 1,sensor 2)
  - Lean sensor mixture correction (B1,S1)
  - Lean sensor mixture correction (B1,S2)
  - Lambda control/Lambda sensor (B1,S2)

- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve

					<ul style="list-style-type: none"> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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LEXUS					SC - SC 300 3.0i Coupe	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD



1991/09 - 1995/08	2JZGE	3.0	228	<ul style="list-style-type: none"> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b></li> </ul>

- Adaptive parameters reset
- Write vehicle identification number (VIN)
- **Current values**
- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value

Gear box control  
Transmission control ECT 2.2

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system

					<ul style="list-style-type: none"> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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LEXUS						SC - SC 400 4.0i Coupe					
Year	Engine	Liters	HP	System	Functions						
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> </ul> </li> </ul>						

Engine control  
TCCS II V3

- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)

- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation

1991/09 - 1995/08	1UZFE	4.0	253	<ul style="list-style-type: none"> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring



					<ul style="list-style-type: none"> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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LEXUS					SC - SC 430 4.3i Coupe	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> </ul> </li> </ul>	

- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean

Engine control  
TCCS II V3

- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve

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- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear

Gear box control  
Transmission control ECT 2.2

- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC

					<ul style="list-style-type: none"> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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LEXUS					SC - SC 400 4.0 Coupe	
Year	Engine	Liters	HP	System	Functions	

**• Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

**• Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

**• Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

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Engine control  
TCCS II V3

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode



			<ul style="list-style-type: none"> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status

- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

1998/09 - 2000/08	1UZFE	4.0	284	<ul style="list-style-type: none"> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring

					<ul style="list-style-type: none"> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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LEXUS					SC [Z4] - SC 430 4.3 Cabrio	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> </ul> </li> </ul>	

- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

Engine control  
TCCS II V3

- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve



				<ul style="list-style-type: none"> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
2001/05	3UZFE	4.3	286	<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU

- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

[2 \[DE\] - 2 1.3](#)

[2 \[DE\] - 2 1.5](#)

[2 \[DE\] - 2 1.4 CD](#)

[2 \[DE\] - 2 1.6 CD](#)

[3 Hatchback - 3 2.3 Hatchback](#)

[3 \[BL\] - 3 2.0 MZR DISI](#)

[3 \[BL\] - 3 1.6 MZR](#)

[3 \[BL\] - 3 1.6 MZR-CD](#)

[3 \[BL\] - 3 2.2 MZR-CD](#)

[3 \[BL\] - 3 2.0 MZR](#)

[3 \[BL\] Hatchback - 3 2.2 MZR-CD Hatchback](#)

[3 \[BL\] Hatchback - 3 1.6 MZR Hatchback](#)

[3 \[BL\] Hatchback - 3 1.6 MZR-CD Hatchback](#)

[3 \[BL\] Hatchback - 3 2.0 MZR DISI Hatchback](#)

[3 \[BL\] Hatchback - 3 2.3 MPS Hatchback](#)

[3 \[BL\] Hatchback - 3 2.0 MZR Hatchback](#)

[3 \[BL\] Hatchback - 3 2.0 Hatchback MZR](#)

[Biante - Biante 2.0i](#)

[Biante - Biante 2.0i 4WD](#)

[Biante - Biante 2.3i](#)

[Demio \[DE\] - Demio 1.3i](#)

[Demio \[DE\] - Demio 1.3i 4WD](#)

[Demio \[DE\] - Demio 1.5i](#)

[2 - 2 1.3i](#)

[2 - 2 1.5i](#)

[2 - 2 1.5 Hatchback](#)

MAZDA						2 [DE] - 2 1.3	
Year	Engine	Liters	HP	System	Functions		
2007/06 -	ZJ	1.3	75	Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>		

MAZDA						2 [DE] - 2 1.5	
Year	Engine	Liters	HP	System	Functions		
2007/06 -	ZY	1.5	102 - 103	Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>		

MAZDA						2 [DE] - 2 1.4 CD	
Year	Engine	Liters	HP	System	Functions		
2007/08 - 2010/09	F6JB	1.4	68	Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>		

MAZDA						2 [DE] - 2 1.6 CD					
Year	Engine	Liters	HP	System		Functions					
2008/11 - 2010/12	Y6	1.6	90	Anti-block system ESP V5.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>					
2010/08 -	Y6	1.6	95	Anti-block system ESP V5.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>					

MAZDA						3 Hatchback - 3 2.3 Hatchback					
Year	Engine	Liters	HP	System		Functions					
2008/09 -	MZR	2.3	0	Anti-block system ESP V6.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> </ul> </li> </ul>					

					<ul style="list-style-type: none"> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul>
2009/09 -	MZR	2.3	0	Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>

MAZDA					
3 [BL] - 3 2.0 MZR DISI					
Year	Engine	Liters	HP	System	Functions
2008/12 -	LF...	2.0	151	Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>

MAZDA					
3 [BL] - 3 1.6 MZR					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> </ul> </li> </ul>

2008/12 -	Z6	1.6	105	Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
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MAZDA						3 [BL] - 3 1.6 MZR-CD					
Year	Engine	Liters	HP	System		Functions					
2008/12 - 2011/07	Y6	1.6	109 - 110	Anti-block system ESP V6.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>					
2010/10 -		1.6	116	Anti-block system ESP V6.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> </ul> </li> </ul>					



					<ul style="list-style-type: none"> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul>
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MAZDA 3 [BL] - 3 2.2 MZR-CD					
Year	Engine	Liters	HP	System	Functions
2009/01 - 2011/07	R2	2.2	150	Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>

MAZDA 3 [BL] - 3 2.0 MZR					
Year	Engine	Liters	HP	System	Functions
2008/12 -	LF...	2.0	150	Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>

MAZDA 3 [BL] Hatchback - 3 2.2 MZR-CD Hatchback					
Year	Engine	Liters	HP	System	Functions
2009/01 -	R2	2.2	150	Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>

MAZDA 3 [BL] Hatchback - 3 1.6 MZR Hatchback					
Year	Engine	Liters	HP	System	Functions
2008/12 -	Z6	1.6	105	Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>

MAZDA 3 [BL] Hatchback - 3 1.6 MZR-CD Hatchback					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

2008/12 - 2011/07	Y6	1.6	109 - 110	Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
2010/10 -	Y6	1.6	116	Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>

MAZDA 3 [BL] Hatchback - 3 2.0 MZR DISI Hatchback					
Year	Engine	Liters	HP	System	Functions
2008/12 -	LF...	2.0	151	Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul>
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MAZDA 3 [BL] Hatchback - 3 2.3 MPS Hatchback					
Year	Engine	Liters	HP	System	Functions
2009/09 -	L3 DISI	2.3	260	Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>

MAZDA 3 [BL] Hatchback - 3 2.0 MZR Hatchback					
Year	Engine	Liters	HP	System	Functions
2008/12 -	LF...	2.0	150	Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> </ul> </li> </ul>

- Pressure sensor

MAZDA 3 [BL] Hatchback - 3 2.0 Hatchback MZR					
Year	Engine	Liters	HP	System	Functions
2010/09 -		2.0	150	Anti-block system ESP V6.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Configuration</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>

MAZDA Biante - Biante 2.0i					
Year	Engine	Liters	HP	System	Functions
2008/07 -	LFVD	2.0	151	Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>

MAZDA Biante - Biante 2.0i 4WD					
Year	Engine	Liters	HP	System	Functions
2008/07 -	LFVD	2.0	144	Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>

MAZDA		Biante - Biante 2.3i			
Year	Engine	Liters	HP	System	Functions
2008/07 -	L3VE	2.3	165	Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>

MAZDA		Demio [DE] - Demio 1.3i			
Year	Engine	Liters	HP	System	Functions
2007/05 -	ZJVEM	1.3	90	Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>
2011/06 -	P3VPS	1.3	84	Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>

MAZDA		Demio [DE] - Demio 1.3i 4WD			
Year	Engine	Liters	HP	System	Functions
2007/05 -	ZJVE	1.3	91	Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>

MAZDA						Demio [DE] - Demio 1.5i	
Year	Engine	Liters	HP	System	Functions		
2007/05 -	ZYVE	1.5	113	Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>		

MAZDA						2 - 2 1.3i	
Year	Engine	Liters	HP	System	Functions		
2008/01 -	ZJ	1.3	86	Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>		
				Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>		

MAZDA						2 - 2 1.5i	
Year	Engine	Liters	HP	System	Functions		
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> </ul> </li> </ul>		

2008/04 -	ZY	1.5	103		<ul style="list-style-type: none"> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul>
				Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>

MAZDA					
2 - 2 1.5 Hatchback					
Year	Engine	Liters	HP	System	Functions
2010/09 -	MZR	1.5	100	Anti-block system ESP V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- rotation angle sensor</li> <li>- Lateral acceleration sensor</li> <li>- Brake pedal switch</li> <li>- Wheel speed front left</li> <li>- Wheel speed front right</li> <li>- Wheel speed rear left</li> <li>- Wheel speed rear right</li> <li>- Pressure sensor</li> </ul> </li> </ul>
				Anti-block system ABS V5.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Driving speed</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Pump motor</li> <li>- Brake pedal switch</li> </ul> </li> </ul>



[A-Klasse \[168\] - A 140](#)

[A-Klasse \[168\] - A 160](#)

[A-Klasse \[168\] - A 160 CDI](#)

[A-Klasse \[168\] - A 170 CDI](#)

[A-Klasse \[168\] - A 190](#)

[A-Klasse \[168\] - A 210 Evolution](#)

[Classe A \[168\] - A 160](#)

[Classe A \[168\] - A 190](#)

[Vaneo \[414\] - Vaneo 1.6](#)

[Vaneo \[414\] - Vaneo 1.9](#)

[Vaneo \[414\] - Vaneo CDI 1.7](#)

Year	Engine	Liters	HP	System	Functions
1997/10 - 2004/08	M 166.940	1.4	82	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Engine revolution</li> <li>- Air conditioner compressor</li> <li>- fan for radiator blowing</li> <li>- Coolant temperature sensor</li> <li>- Vaporization temperature sensor</li> <li>- Ambient temperature sensor</li> <li>- Terminal 15</li> <li>- Cooling agent pressure sensor</li> <li>- Clump 58D</li> <li>- Salon temperature sensor</li> <li>- Humidity sensor: dew point temperature</li> <li>- Air mix flap</li> <li>- Refr. compr. contr. valve actuation</li> <li>- Electric auxiliary heater</li> <li>- Switching off at kick-down</li> <li>- Security shutdown</li> <li>- MAX button</li> <li>- Auxiliary heater heating element 1</li> <li>- Auxiliary heater – Heating component 2</li> <li>- Terminal 15X</li> <li>- Auxiliary heater heating element 3</li> <li>- Supplementary heater, heating element 4</li> <li>- Supplementary heater, heating element 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Pump, hot water</li> <li>- Fresh air fan</li> <li>- El. intake fan engine/air conditioner</li> <li>- Button lights</li> <li>- Air-mix flaps</li> <li>- Cooling agent compressor</li> </ul> </li> </ul>
2001/03 - 2004/08	M 166.940	1.4	82	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Engine revolution</li> <li>- Air conditioner compressor</li> <li>- fan for radiator blowing</li> <li>- Coolant temperature sensor</li> <li>- Vaporization temperature sensor</li> <li>- Ambient temperature sensor</li> <li>- Terminal 15</li> <li>- Cooling agent pressure sensor</li> <li>- Clump 58D</li> <li>- Salon temperature sensor</li> <li>- Humidity sensor: dew point temperature</li> <li>- Air mix flap</li> <li>- Refr. compr. contr. valve actuation</li> <li>- Electric auxiliary heater</li> <li>- Switching off at kick-down</li> <li>- Security shutdown</li> <li>- MAX button</li> <li>- Auxiliary heater heating element 1</li> <li>- Auxiliary heater – Heating component 2</li> <li>- Terminal 15X</li> <li>- Auxiliary heater heating element 3</li> <li>- Supplementary heater, heating element 4</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Supplementary heater, heating element 5</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Pump, hot water</li> <li>- Fresh air fan</li> <li>- El. intake fan engine/air conditioner</li> <li>- Button lights</li> <li>- Air-mix flaps</li> <li>- Cooling agent compressor</li> </ul> </li> </ul>
2000/09 - 2004/08	M 166.960	1.6	82	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Engine revolution</li> <li>- Air conditioner compressor</li> <li>- fan for radiator blowing</li> <li>- Coolant temperature sensor</li> <li>- Vaporization temperature sensor</li> <li>- Ambient temperature sensor</li> <li>- Terminal 15</li> <li>- Cooling agent pressure sensor</li> <li>- Clump 58D</li> <li>- Salon temperature sensor</li> <li>- Humidity sensor: dew point temperature</li> <li>- Air mix flap</li> <li>- Refr. compr. contr. valve actuation</li> <li>- Electric auxiliary heater</li> <li>- Switching off at kick-down</li> <li>- Security shutdown</li> <li>- MAX button</li> <li>- Auxiliary heater heating element 1</li> <li>- Auxiliary heater – Heating component 2</li> <li>- Terminal 15X</li> <li>- Auxiliary heater heating element 3</li> <li>- Supplementary heater, heating element 4</li> <li>- Supplementary heater, heating element 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Pump, hot water</li> <li>- Fresh air fan</li> <li>- El. intake fan engine/air conditioner</li> <li>- Button lights</li> <li>- Air-mix flaps</li> <li>- Cooling agent compressor</li> </ul> </li> </ul>

MERCEDES BENZ					A-Klasse [168] - A 160	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Engine revolution</li> <li>- Air conditioner compressor</li> <li>- fan for radiator blowing</li> <li>- Coolant temperature sensor</li> <li>- Vaporization temperature sensor</li> <li>- Ambient temperature sensor</li> <li>- Terminal 15</li> <li>- Cooling agent pressure sensor</li> <li>- Clump 58D</li> <li>- Salon temperature sensor</li> <li>- Humidity sensor: dew point temperature</li> </ul> </li> </ul>	

1997/10 - 2004/08	M 166.960	1.6	102	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> <li>- Air mix flap</li> <li>- Refr. compr. contr. valve actuation</li> <li>- Electric auxiliary heater</li> <li>- Switching off at kick-down</li> <li>- Security shutdown</li> <li>- MAX button</li> <li>- Auxiliary heater heating element 1</li> <li>- Auxiliary heater – Heating component 2</li> <li>- Terminal 15X</li> <li>- Auxiliary heater heating element 3</li> <li>- Supplementary heater, heating element 4</li> <li>- Supplementary heater, heating element 5</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Pump, hot water</li> <li>- Fresh air fan</li> <li>- El. intake fan engine/air conditioner</li> <li>- Button lights</li> <li>- Air-mix flaps</li> <li>- Cooling agent compressor</li> </ul> </li> </ul>
2001/03 - 2004/08	M 166.960	1.6	102	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Engine revolution</li> <li>- Air conditioner compressor</li> <li>- fan for radiator blowing</li> <li>- Coolant temperature sensor</li> <li>- Vaporization temperature sensor</li> <li>- Ambient temperature sensor</li> <li>- Terminal 15</li> <li>- Cooling agent pressure sensor</li> <li>- Clump 58D</li> <li>- Salon temperature sensor</li> <li>- Humidity sensor: dew point temperature</li> <li>- Air mix flap</li> <li>- Refr. compr. contr. valve actuation</li> <li>- Electric auxiliary heater</li> <li>- Switching off at kick-down</li> <li>- Security shutdown</li> <li>- MAX button</li> <li>- Auxiliary heater heating element 1</li> <li>- Auxiliary heater – Heating component 2</li> <li>- Terminal 15X</li> <li>- Auxiliary heater heating element 3</li> <li>- Supplementary heater, heating element 4</li> <li>- Supplementary heater, heating element 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Pump, hot water</li> <li>- Fresh air fan</li> <li>- El. intake fan engine/air conditioner</li> <li>- Button lights</li> <li>- Air-mix flaps</li> <li>- Cooling agent compressor</li> </ul> </li> </ul>

MERCEDES BENZ					A-Klasse [168] - A 160 CDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> </ul> </li> </ul>	

<p>1998/09 - 2001/02</p>	<p>OM 668.941</p>	<p>1.7</p>	<p>60</p>	<p>Heating / Air conditioner Automatic A/C 1.1</p>	<ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- Air conditioner compressor</li> <li>- fan for radiator blowing</li> <li>- Coolant temperature sensor</li> <li>- Vaporization temperature sensor</li> <li>- Ambient temperature sensor</li> <li>- Terminal 15</li> <li>- Cooling agent pressure sensor</li> <li>- Clump 58D</li> <li>- Salon temperature sensor</li> <li>- Humidity sensor: dew point temperature</li> <li>- Air mix flap</li> <li>- Refr. compr. contr. valve actuation</li> <li>- Electric auxiliary heater</li> <li>- Switching off at kick-down</li> <li>- Security shutdown</li> <li>- MAX button</li> <li>- Auxiliary heater heating element 1</li> <li>- Auxiliary heater – Heating component 2</li> <li>- Terminal 15X</li> <li>- Auxiliary heater heating element 3</li> <li>- Supplementary heater, heating element 4</li> <li>- Supplementary heater, heating element 5</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Pump, hot water</li> <li>- Fresh air fan</li> <li>- El. intake fan engine/air conditioner</li> <li>- Button lights</li> <li>- Air-mix flaps</li> <li>- Cooling agent compressor</li> </ul> </li> </ul>
<p>2001/03 - 2004/08</p>	<p>OM 668.940</p>	<p>1.7</p>	<p>75</p>	<p>Heating / Air conditioner Automatic A/C 1.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Engine revolution</li> <li>- Air conditioner compressor</li> <li>- fan for radiator blowing</li> <li>- Coolant temperature sensor</li> <li>- Vaporization temperature sensor</li> <li>- Ambient temperature sensor</li> <li>- Terminal 15</li> <li>- Cooling agent pressure sensor</li> <li>- Clump 58D</li> <li>- Salon temperature sensor</li> <li>- Humidity sensor: dew point temperature</li> <li>- Air mix flap</li> <li>- Refr. compr. contr. valve actuation</li> <li>- Electric auxiliary heater</li> <li>- Switching off at kick-down</li> <li>- Security shutdown</li> <li>- MAX button</li> <li>- Auxiliary heater heating element 1</li> <li>- Auxiliary heater – Heating component 2</li> <li>- Terminal 15X</li> <li>- Auxiliary heater heating element 3</li> <li>- Supplementary heater, heating element 4</li> <li>- Supplementary heater, heating element 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Pump, hot water</li> <li>- Fresh air fan</li> <li>- El. intake fan engine/air conditioner</li> <li>- Button lights</li> <li>- Air-mix flaps</li> <li>- Cooling agent compressor</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
1998/07 - 2001/02	OM 668.940	1.7	90	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Engine revolution</li> <li>- Air conditioner compressor</li> <li>- fan for radiator blowing</li> <li>- Coolant temperature sensor</li> <li>- Vaporization temperature sensor</li> <li>- Ambient temperature sensor</li> <li>- Terminal 15</li> <li>- Cooling agent pressure sensor</li> <li>- Clump 58D</li> <li>- Salon temperature sensor</li> <li>- Humidity sensor: dew point temperature</li> <li>- Air mix flap</li> <li>- Refr. compr. contr. valve actuation</li> <li>- Electric auxiliary heater</li> <li>- Switching off at kick-down</li> <li>- Security shutdown</li> <li>- MAX button</li> <li>- Auxiliary heater heating element 1</li> <li>- Auxiliary heater – Heating component 2</li> <li>- Terminal 15X</li> <li>- Auxiliary heater heating element 3</li> <li>- Supplementary heater, heating element 4</li> <li>- Supplementary heater, heating element 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Pump, hot water</li> <li>- Fresh air fan</li> <li>- El. intake fan engine/air conditioner</li> <li>- Button lights</li> <li>- Air-mix flaps</li> <li>- Cooling agent compressor</li> </ul> </li> </ul>
2001/03 - 2004/08	OM 668.942	1.7	95	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Engine revolution</li> <li>- Air conditioner compressor</li> <li>- fan for radiator blowing</li> <li>- Coolant temperature sensor</li> <li>- Vaporization temperature sensor</li> <li>- Ambient temperature sensor</li> <li>- Terminal 15</li> <li>- Cooling agent pressure sensor</li> <li>- Clump 58D</li> <li>- Salon temperature sensor</li> <li>- Humidity sensor: dew point temperature</li> <li>- Air mix flap</li> <li>- Refr. compr. contr. valve actuation</li> <li>- Electric auxiliary heater</li> <li>- Switching off at kick-down</li> <li>- Security shutdown</li> <li>- MAX button</li> <li>- Auxiliary heater heating element 1</li> <li>- Auxiliary heater – Heating component 2</li> <li>- Terminal 15X</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Auxiliary heater heating element 3</li> <li>- Supplementary heater, heating element 4</li> <li>- Supplementary heater, heating element 5</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Pump, hot water</li> <li>- Fresh air fan</li> <li>- El. intake fan engine/air conditioner</li> <li>- Button lights</li> <li>- Air-mix flaps</li> <li>- Cooling agent compressor</li> </ul> </li> </ul>
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<b>MERCEDES BENZ</b>	<b>A-Klasse [168] - A 190</b>
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Year	Engine	Liters	HP	System	Functions
1999/03 - 2004/08	M 166.990	1.9	125	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Engine revolution</li> <li>- Air conditioner compressor</li> <li>- fan for radiator blowing</li> <li>- Coolant temperature sensor</li> <li>- Vaporization temperature sensor</li> <li>- Ambient temperature sensor</li> <li>- Terminal 15</li> <li>- Cooling agent pressure sensor</li> <li>- Clump 58D</li> <li>- Salon temperature sensor</li> <li>- Humidity sensor: dew point temperature</li> <li>- Air mix flap</li> <li>- Refr. compr. contr. valve actuation</li> <li>- Electric auxiliary heater</li> <li>- Switching off at kick-down</li> <li>- Security shutdown</li> <li>- MAX button</li> <li>- Auxiliary heater heating element 1</li> <li>- Auxiliary heater – Heating component 2</li> <li>- Terminal 15X</li> <li>- Auxiliary heater heating element 3</li> <li>- Supplementary heater, heating element 4</li> <li>- Supplementary heater, heating element 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Pump, hot water</li> <li>- Fresh air fan</li> <li>- El. intake fan engine/air conditioner</li> <li>- Button lights</li> <li>- Air-mix flaps</li> <li>- Cooling agent compressor</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Engine revolution</li> <li>- Air conditioner compressor</li> <li>- fan for radiator blowing</li> <li>- Coolant temperature sensor</li> <li>- Vaporization temperature sensor</li> <li>- Ambient temperature sensor</li> <li>- Terminal 15</li> <li>- Cooling agent pressure sensor</li> <li>- Clump 58D</li> </ul> </li> </ul>

2001/03 - 2004/08	M 166.990	1.9	125	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> <li>- Salon temperature sensor</li> <li>- Humidity sensor: dew point temperature</li> <li>- Air mix flap</li> <li>- Refr. compr. contr. valve actuation</li> <li>- Electric auxiliary heater</li> <li>- Switching off at kick-down</li> <li>- Security shutdown</li> <li>- MAX button</li> <li>- Auxiliary heater heating element 1</li> <li>- Auxiliary heater – Heating component 2</li> <li>- Terminal 15X</li> <li>- Auxiliary heater heating element 3</li> <li>- Supplementary heater, heating element 4</li> <li>- Supplementary heater, heating element 5</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Pump, hot water</li> <li>- Fresh air fan</li> <li>- El. intake fan engine/air conditioner</li> <li>- Button lights</li> <li>- Air-mix flaps</li> <li>- Cooling agent compressor</li> </ul> </li> </ul>
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MERCEDES BENZ		A-Klasse [168] - A 210 Evolution			
Year	Engine	Liters	HP	System	Functions
2002/03 - 2004/08	M 166.995	2.1	140	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Engine revolution</li> <li>- Air conditioner compressor</li> <li>- fan for radiator blowing</li> <li>- Coolant temperature sensor</li> <li>- Vaporization temperature sensor</li> <li>- Ambient temperature sensor</li> <li>- Terminal 15</li> <li>- Cooling agent pressure sensor</li> <li>- Clump 58D</li> <li>- Salon temperature sensor</li> <li>- Humidity sensor: dew point temperature</li> <li>- Air mix flap</li> <li>- Refr. compr. contr. valve actuation</li> <li>- Electric auxiliary heater</li> <li>- Switching off at kick-down</li> <li>- Security shutdown</li> <li>- MAX button</li> <li>- Auxiliary heater heating element 1</li> <li>- Auxiliary heater – Heating component 2</li> <li>- Terminal 15X</li> <li>- Auxiliary heater heating element 3</li> <li>- Supplementary heater, heating element 4</li> <li>- Supplementary heater, heating element 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Pump, hot water</li> <li>- Fresh air fan</li> <li>- El. intake fan engine/air conditioner</li> <li>- Button lights</li> <li>- Air-mix flaps</li> <li>- Cooling agent compressor</li> </ul> </li> </ul>



Year	Engine	Liters	HP	System	Functions
1999/05 - 2005/08	M 166.960	1.6	102	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Engine revolution</li> <li>- Air conditioner compressor</li> <li>- fan for radiator blowing</li> <li>- Coolant temperature sensor</li> <li>- Vaporization temperature sensor</li> <li>- Ambient temperature sensor</li> <li>- Terminal 15</li> <li>- Cooling agent pressure sensor</li> <li>- Clump 58D</li> <li>- Salon temperature sensor</li> <li>- Humidity sensor: dew point temperature</li> <li>- Air mix flap</li> <li>- Refr. compr. contr. valve actuation</li> <li>- Electric auxiliary heater</li> <li>- Switching off at kick-down</li> <li>- Security shutdown</li> <li>- MAX button</li> <li>- Auxiliary heater heating element 1</li> <li>- Auxiliary heater – Heating component 2</li> <li>- Terminal 15X</li> <li>- Auxiliary heater heating element 3</li> <li>- Supplementary heater, heating element 4</li> <li>- Supplementary heater, heating element 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Pump, hot water</li> <li>- Fresh air fan</li> <li>- El. intake fan engine/air conditioner</li> <li>- Button lights</li> <li>- Air-mix flaps</li> <li>- Cooling agent compressor</li> </ul> </li> </ul>

MERCEDES BENZ						Classe A [168] - A 190					
Year	Engine	Liters	HP	System	Functions						
2000/09 - 2005/08	M 166.990	1.9	125	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Engine revolution</li> <li>- Air conditioner compressor</li> <li>- fan for radiator blowing</li> <li>- Coolant temperature sensor</li> <li>- Vaporization temperature sensor</li> <li>- Ambient temperature sensor</li> <li>- Terminal 15</li> <li>- Cooling agent pressure sensor</li> <li>- Clump 58D</li> <li>- Salon temperature sensor</li> <li>- Humidity sensor: dew point temperature</li> <li>- Air mix flap</li> <li>- Refr. compr. contr. valve actuation</li> <li>- Electric auxiliary heater</li> <li>- Switching off at kick-down</li> <li>- Security shutdown</li> <li>- MAX button</li> <li>- Auxiliary heater heating element 1</li> <li>- Auxiliary heater – Heating component 2</li> </ul> </li> </ul>						

					<ul style="list-style-type: none"> <li>- Terminal 15X</li> <li>- Auxiliary heater heating element 3</li> <li>- Supplementary heater, heating element 4</li> <li>- Supplementary heater, heating element 5</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Pump, hot water</li> <li>- Fresh air fan</li> <li>- El. intake fan engine/air conditioner</li> <li>- Button lights</li> <li>- Air-mix flaps</li> <li>- Cooling agent compressor</li> </ul> </li> </ul>
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MERCEDES BENZ					Vaneo [414] - Vaneo 1.6	
Year	Engine	Liters	HP	System	Functions	
2002/02 - 2005/08	M 166.961	1.6	82	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Engine revolution</li> <li>- Air conditioner compressor</li> <li>- fan for radiator blowing</li> <li>- Coolant temperature sensor</li> <li>- Vaporization temperature sensor</li> <li>- Ambient temperature sensor</li> <li>- Terminal 15</li> <li>- Cooling agent pressure sensor</li> <li>- Clump 58D</li> <li>- Salon temperature sensor</li> <li>- Humidity sensor: dew point temperature</li> <li>- Air mix flap</li> <li>- Refr. compr. contr. valve actuation</li> <li>- Electric auxiliary heater</li> <li>- Switching off at kick-down</li> <li>- Security shutdown</li> <li>- MAX button</li> <li>- Auxiliary heater heating element 1</li> <li>- Auxiliary heater – Heating component 2</li> <li>- Terminal 15X</li> <li>- Auxiliary heater heating element 3</li> <li>- Supplementary heater, heating element 4</li> <li>- Supplementary heater, heating element 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Pump, hot water</li> <li>- Fresh air fan</li> <li>- El. intake fan engine/air conditioner</li> <li>- Button lights</li> <li>- Air-mix flaps</li> <li>- Cooling agent compressor</li> </ul> </li> </ul>	

MERCEDES BENZ					Vaneo [414] - Vaneo 1.9	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Engine revolution</li> <li>- Air conditioner compressor</li> <li>- fan for radiator blowing</li> </ul> </li> </ul>	

2002/02 - 2005/08	M 166.991	1.9	125	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> <li>- Coolant temperature sensor</li> <li>- Vaporization temperature sensor</li> <li>- Ambient temperature sensor</li> <li>- Terminal 15</li> <li>- Cooling agent pressure sensor</li> <li>- Clump 58D</li> <li>- Salon temperature sensor</li> <li>- Humidity sensor: dew point temperature</li> <li>- Air mix flap</li> <li>- Refr. compr. contr. valve actuation</li> <li>- Electric auxiliary heater</li> <li>- Switching off at kick-down</li> <li>- Security shutdown</li> <li>- MAX button</li> <li>- Auxiliary heater heating element 1</li> <li>- Auxiliary heater – Heating component 2</li> <li>- Terminal 15X</li> <li>- Auxiliary heater heating element 3</li> <li>- Supplementary heater, heating element 4</li> <li>- Supplementary heater, heating element 5</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Pump, hot water</li> <li>- Fresh air fan</li> <li>- El. intake fan engine/air conditioner</li> <li>- Button lights</li> <li>- Air-mix flaps</li> <li>- Cooling agent compressor</li> </ul> </li> </ul>
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MERCEDES BENZ						Vaneo [414] - Vaneo CDI 1.7	
Year	Engine	Liters	HP	System	Functions		
2002/02 - 2005/08	OM 668.914	1.7	75	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Engine revolution</li> <li>- Air conditioner compressor</li> <li>- fan for radiator blowing</li> <li>- Coolant temperature sensor</li> <li>- Vaporization temperature sensor</li> <li>- Ambient temperature sensor</li> <li>- Terminal 15</li> <li>- Cooling agent pressure sensor</li> <li>- Clump 58D</li> <li>- Salon temperature sensor</li> <li>- Humidity sensor: dew point temperature</li> <li>- Air mix flap</li> <li>- Refr. compr. contr. valve actuation</li> <li>- Electric auxiliary heater</li> <li>- Switching off at kick-down</li> <li>- Security shutdown</li> <li>- MAX button</li> <li>- Auxiliary heater heating element 1</li> <li>- Auxiliary heater – Heating component 2</li> <li>- Terminal 15X</li> <li>- Auxiliary heater heating element 3</li> <li>- Supplementary heater, heating element 4</li> <li>- Supplementary heater, heating element 5</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fresh air valve/air circulation</li> <li>- Pump, hot water</li> <li>- Fresh air fan</li> <li>- El. intake fan engine/air conditioner</li> <li>- Button lights</li> </ul> </li> </ul>		

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|  |  |  |  |  |  | <ul style="list-style-type: none"><li>- Air-mix flaps</li><li>- Cooling agent compressor</li></ul> |
|--|--|--|--|--|--|--|

[Outlander \[CW\] - Outlander 2.2 DI-D 4x4](#)

Year	Engine	Liters	HP	System	Functions
2007/09 - 2012/12	4H...	2.2	156	Engine control Diesel EDC 16CP39 MIT	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Quantities comparison</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Injector quantity adjustment</li> <li>- Exhaust gas recirculation control unit</li> <li>- Reset Lambda sensor adaptation values</li> <li>- Rest of particle filter adaption values</li> <li>- HFM adaption reset</li> <li>- Reset DPF adaptation parameters</li> <li>- Reset additive level</li> <li>- Filling of additive tank</li> <li>- Adapt air mass meter</li> <li>- Reset turbocharger adaption values</li> <li>- Exhaust gas recirculation valve basic setting</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Actual value particle filter</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Quantity correction for cylinder 1</li> <li>- Quantity correction for cylinder 2</li> <li>- Quantity correction for cylinder 3</li> <li>- Quantity correction for cylinder 4</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Coolant temperature</li> <li>- Exhausted gases recirculation system</li> <li>- Battery voltage</li> <li>- Engine revolution</li> <li>- atmospheric pressure</li> <li>- Exhaust gas recirculation control</li> <li>- cruise control switch</li> <li>- valve, exhausted gases recirculation</li> <li>- Pressure control turbo charger</li> <li>- Immobilizer</li> <li>- Regulator, exhausted gases recirculation (ARF)</li> <li>- fan relay</li> <li>- Rail pressure, nominal</li> <li>- Rail pressure, actual</li> <li>- Air mass, nominal value</li> <li>- Air mass, actual value</li> <li>- Turbo pressure, nominal value</li> <li>- Turbo pressure, actual value</li> <li>- Intake air temperature</li> <li>- Brake pedal switch</li> <li>- Acceleration pedal position sensor 1</li> <li>- Acceleration pedal position sensor 2</li> <li>- Brake pedal switch (redundancy)</li> <li>- Engine oil pressure signal</li> <li>- Tempomat speed (required value)</li> <li>- Radiator fan control</li> <li>- Cooling agent pressure</li> <li>- Exhausted gases recirculation valve position (EGR)</li> <li>- Additive minimum level</li> <li>- Injected amount of additive</li> <li>- Correction, Injection time</li> <li>- DPF temperature</li> <li>- VGT (variable turbine geometry) Control Status</li> <li>- Time with critical exhaust temperature</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Time with critical piston temperature</li> <li>- Particulate filter contamination level</li> <li>- Estimated remaining HDP operating time</li> <li>- High-pressure pump running time with excessive pressure</li> <li>- Number of electronic control unit programming</li> <li>- Clutch pedal</li> <li>- Exhaust gas recirculation Position Actual Value</li> <li>- Exhaust gas recirculation Position Target Value</li> <li>- Ash content particle filter</li> <li>- Injected quantity (total)</li> <li>- Cooling agent compressor request</li> <li>- Radiator fan controller target value</li> <li>- Particle filter differential pressure</li> <li>- Intake air temperature 2</li> <li>- Cylinder 1 injector voltage</li> <li>- Cylinder 2 injector voltage</li> <li>- Cylinder 3 injector voltage</li> <li>- Cylinder 4 injector voltage</li> <li>- Mileage (km) since regeneration</li> <li>- Calculated remaining mileage in km</li> <li>- Status speed control</li> <li>- Average time last 5 regenerations</li> <li>- Fuel high pressure control/quantity control</li> <li>- Idle speed control long term adjustment</li> <li>- Additive reservoir</li> <li>- Suction control valve control current nominal value</li> <li>- Suction control valve control current actual value</li> <li>- Distance from the last DPF change</li> <li>- Particle filter quality</li> <li>- Additive system status</li> <li>- Residual additive quantity</li> <li>• <b>Actuators</b></li> <li>- fan for blowing radiator control</li> <li>- turbo charger regulating valve</li> <li>- exhausted gases recirculation solenoid</li> <li>- warming up relay</li> <li>- Engine oil sensor</li> <li>- Suction control valve</li> <li>- Fuel pressure controller</li> <li>- Bypass valve of the exhaust gas recirculation cooler</li> <li>- Additive delivery pump</li> </ul>
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[Agila \[A\] - Agila 1.0 Twinport](#)

[Agila \[A\] - Agila 1.2 Twinport](#)

[Astra \[G\] - Astra 1.4 Twinport](#)

[Astra \[G\] Caravan - Astra 1.4 1.4 i Twinport Caravan](#)

[Combo C \[Tour\] - Combo 1.4 i Twinport](#)

[Combo \[D\] - Combo 1.3](#)

[Combo \[D\] - Combo 1.4](#)

[Combo \[D\] - Combo 1.6](#)

[Combo \[D\] - Combo 2.0](#)

[Corsa \[C\] - Corsa 1.0 Twinport](#)

[Corsa \[C\] - Corsa 1.4 Twinport](#)

[Corsa \[C\] - Corsa 1.2i Twinport](#)

[Meriva \[A\] - Meriva 1.4 i Twinport](#)

[Meriva \[A\] - Meriva 1.6 i OPC Turbo](#)

[Tigra \[B\] TwinTop - Tigra 1.4i TwinTop](#)



OPEL				Agila [A] - Agila 1.0 Twinport	
Year	Engine	Liters	HP	System	Functions
2003/08 - 2008/02	Z 10 XEP	1.0	60	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Air consumption meter</li> <li>- Air conditioner switching command</li> <li>- Fuel pump relay</li> <li>- Air mass meter voltage</li> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- injection duration</li> <li>- Ignition angle</li> <li>- recommended idle revolutions</li> <li>- Immobilizer</li> <li>- Main relay</li> <li>- Car speed sensor</li> <li>- Radiator fan. stage 2</li> <li>- Service lamp</li> <li>- Ignition</li> <li>- Lambda-control status (bank 1, sensor 1) 1)</li> <li>- Throttle valve memo value</li> <li>- Oil pressure</li> <li>- Fuel fill level signal</li> <li>- Fuel feeding stop</li> <li>- Catalyst protection enrichment (B1)</li> <li>- Full load enrichment</li> <li>- Throttle valve position, Duty cycle</li> <li>- Air conditioner pressure sensor voltage</li> <li>- Throttle valve A, saved idle speed position</li> <li>- Swirl flap position sensor</li> <li>- Oil life</li> <li>- Oil change warning</li> <li>- Air compressor switch off</li> <li>- Radiator fan speed 3:</li> <li>- Vehicle acceleration</li> <li>- Security holding time</li> <li>- Cylinder 1 knock sensor ZW correction</li> <li>- Cylinder 2 knock sensor ZW correction</li> <li>- Cylinder 3 knock sensor ZW correction</li> <li>- Cylinder 4 knock sensor ZW correction</li> <li>- E-Gas fail safe</li> <li>• <b>Adjustment</b></li> <li>- Throttle valve adaption</li> <li>- Idle running speed programing</li> <li>- Lambda control adaptation</li> </ul>

OPEL				Agila [A] - Agila 1.2 Twinport	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Air consumption meter</li> <li>- Air conditioner switching command</li> <li>- Fuel pump relay</li> <li>- Air mass meter voltage</li> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- injection duration</li> <li>- Ignition angle</li> <li>- recommended idle revolutions</li> <li>- Immobilizer</li> <li>- Main relay</li> <li>- Car speed sensor</li> <li>- Radiator fan. stage 2</li> <li>- Service lamp</li> </ul>

2004/07 - 2008/02	Z 12 XEP	1.2	80	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> <li>- Ignition</li> <li>- Lambda-control status (bank 1, sensor 1) 1)</li> <li>- Throttle valve memo value</li> <li>- Oil pressure</li> <li>- Fuel fill level signal</li> <li>- Fuel feeding stop</li> <li>- Catalyst protection enrichment (B1)</li> <li>- Full load enrichment</li> <li>- Throttle valve position, Duty cycle</li> <li>- Air conditioner pressure sensor voltage</li> <li>- Throttle valve A, saved idle speed position</li> <li>- Swirl flap position sensor</li> <li>- Oil life</li> <li>- Oil change warning</li> <li>- Air compressor switch off</li> <li>- Radiator fan speed 3:</li> <li>- Vehicle acceleration</li> <li>- Security holding time</li> <li>- Cylinder 1 knock sensor ZW correction</li> <li>- Cylinder 2 knock sensor ZW correction</li> <li>- Cylinder 3 knock sensor ZW correction</li> <li>- Cylinder 4 knock sensor ZW correction</li> <li>- E-Gas fail safe</li> <li>• <b>Adjustment</b> <ul style="list-style-type: none"> <li>- Throttle valve adaption</li> <li>- Idle running speed programing</li> <li>- Lambda control adaptation</li> </ul> </li> </ul>
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OPEL					
Astra [G] - Astra 1.4 Twinport					
Year	Engine	Liters	HP	System	Functions
2003/09 - 2009/06	Z 14 XEP	1.4	90	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air consumption meter</li> <li>- Air conditioner switching command</li> <li>- Fuel pump relay</li> <li>- Air mass meter voltage</li> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- injection duration</li> <li>- Ignition angle</li> <li>- recommended idle revolutions</li> <li>- Immobilizer</li> <li>- Main relay</li> <li>- Car speed sensor</li> <li>- Radiator fan. stage 2</li> <li>- Service lamp</li> <li>- Ignition</li> <li>- Lambda-control status (bank 1, sensor 1) 1)</li> <li>- Throttle valve memo value</li> <li>- Oil pressure</li> <li>- Fuel fill level signal</li> <li>- Fuel feeding stop</li> <li>- Catalyst protection enrichment (B1)</li> <li>- Full load enrichment</li> <li>- Throttle valve position, Duty cycle</li> <li>- Air conditioner pressure sensor voltage</li> <li>- Throttle valve A, saved idle speed position</li> <li>- Swirl flap position sensor</li> <li>- Oil life</li> <li>- Oil change warning</li> <li>- Air compressor switch off</li> <li>- Radiator fan speed 3:</li> <li>- Vehicle acceleration</li> <li>- Security holding time</li> <li>- Cylinder 1 knock sensor ZW correction</li> <li>- Cylinder 2 knock sensor ZW correction</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Cylinder 3 knock sensor ZW correction</li> <li>- Cylinder 4 knock sensor ZW correction</li> <li>- E-Gas fail safe</li> <li>• <b>Adjustment</b> <ul style="list-style-type: none"> <li>- Throttle valve adaption</li> <li>- Idle running speed programing</li> <li>- Lambda control adaptation</li> </ul> </li> </ul>
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OPEL Astra [G] Caravan - Astra 1.4 1.4 i Twinport Caravan					
Year	Engine	Liters	HP	System	Functions
2003/09 - 2009/07	Z 14 XEP	1.4	90	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air consumption meter</li> <li>- Air conditioner switching command</li> <li>- Fuel pump relay</li> <li>- Air mass meter voltage</li> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- injection duration</li> <li>- Ignition angle</li> <li>- recommended idle revolutions</li> <li>- Immobilizer</li> <li>- Main relay</li> <li>- Car speed sensor</li> <li>- Radiator fan. stage 2</li> <li>- Service lamp</li> <li>- Ignition</li> <li>- Lambda-control status (bank 1, sensor 1) 1)</li> <li>- Throttle valve memo value</li> <li>- Oil pressure</li> <li>- Fuel fill level signal</li> <li>- Fuel feeding stop</li> <li>- Catalyst protection enrichment (B1)</li> <li>- Full load enrichment</li> <li>- Throttle valve position, Duty cycle</li> <li>- Air conditioner pressure sensor voltage</li> <li>- Throttle valve A, saved idle speed position</li> <li>- Swirl flap position sensor</li> <li>- Oil life</li> <li>- Oil change warning</li> <li>- Air compressor switch off</li> <li>- Radiator fan speed 3:</li> <li>- Vehicle acceleration</li> <li>- Security holding time</li> <li>- Cylinder 1 knock sensor ZW correction</li> <li>- Cylinder 2 knock sensor ZW correction</li> <li>- Cylinder 3 knock sensor ZW correction</li> <li>- Cylinder 4 knock sensor ZW correction</li> <li>- E-Gas fail safe</li> </ul> </li> <li>• <b>Adjustment</b> <ul style="list-style-type: none"> <li>- Throttle valve adaption</li> <li>- Idle running speed programing</li> <li>- Lambda control adaptation</li> </ul> </li> </ul>

OPEL Combo C [Tour] - Combo 1.4 i Twinport					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air consumption meter</li> <li>- Air conditioner switching command</li> <li>- Fuel pump relay</li> <li>- Air mass meter voltage</li> <li>- Air conditioner electromagnetic clutch - compressor</li> </ul> </li> </ul>

2004/09 - 2012/01	Z 14 XEP	1.4	90	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> <li>- injection duration</li> <li>- Ignition angle</li> <li>- recommended idle revolutions</li> <li>- Immobilizer</li> <li>- Main relay</li> <li>- Car speed sensor</li> <li>- Radiator fan. stage 2</li> <li>- Service lamp</li> <li>- Ignition</li> <li>- Lambda-control status (bank 1, sensor 1) 1)</li> <li>- Throttle valve memo value</li> <li>- Oil pressure</li> <li>- Fuel fill level signal</li> <li>- Fuel feeding stop</li> <li>- Catalyst protection enrichment (B1)</li> <li>- Full load enrichment</li> <li>- Throttle valve position, Duty cycle</li> <li>- Air conditioner pressure sensor voltage</li> <li>- Throttle valve A, saved idle speed position</li> <li>- Swirl flap position sensor</li> <li>- Oil life</li> <li>- Oil change warning</li> <li>- Air compressor switch off</li> <li>- Radiator fan speed 3:</li> <li>- Vehicle acceleration</li> <li>- Security holding time</li> <li>- Cylinder 1 knock sensor ZW correction</li> <li>- Cylinder 2 knock sensor ZW correction</li> <li>- Cylinder 3 knock sensor ZW correction</li> <li>- Cylinder 4 knock sensor ZW correction</li> <li>- E-Gas fail safe</li> <li>• <b>Adjustment</b> <ul style="list-style-type: none"> <li>- Throttle valve adaption</li> <li>- Idle running speed programing</li> <li>- Lambda control adaptation</li> </ul> </li> </ul>
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OPEL						Combo [D] - Combo 1.3	
Year	Engine	Liters	HP	System	Functions		
2012/02 -	A 13 FD	1.2	90	Parking assisting system Park Distance Control 8.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>		

OPEL						Combo [D] - Combo 1.4	
Year	Engine	Liters	HP	System	Functions		
2012/02 -	A 14 FP	1.4	95	Parking assisting system Park Distance Control 8.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> </ul> </li> </ul>		

					<ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul>
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OPEL Combo [D] - Combo 1.6					
Year	Engine	Liters	HP	System	Functions
2012/02 -	A 16 FDL	1.6	90	Parking assisting system Park Distance Control 8.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

OPEL Combo [D] - Combo 2.0					
Year	Engine	Liters	HP	System	Functions
2012/02 -	A 20 FD	2.0	135	Parking assisting system Park Distance Control 8.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

OPEL Corsa [C] - Corsa 1.0 Twinport					
Year	Engine	Liters	HP	System	Functions
2003/09 - 2006/09	Z 10 XEP	1.0	60	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air consumption meter</li> <li>- Air conditioner switching command</li> <li>- Fuel pump relay</li> <li>- Air mass meter voltage</li> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- injection duration</li> <li>- Ignition angle</li> <li>- recommended idle revolutions</li> <li>- Immobilizer</li> <li>- Main relay</li> <li>- Car speed sensor</li> <li>- Radiator fan. stage 2</li> <li>- Service lamp</li> <li>- Ignition</li> <li>- Lambda-control status (bank 1, sensor 1) 1)</li> <li>- Throttle valve memo value</li> <li>- Oil pressure</li> <li>- Fuel fill level signal</li> <li>- Fuel feeding stop</li> <li>- Catalyst protection enrichment (B1)</li> <li>- Full load enrichment</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Throttle valve position, Duty cycle</li> <li>- Air conditioner pressure sensor voltage</li> <li>- Throttle valve A, saved idle speed position</li> <li>- Swirl flap position sensor</li> <li>- Oil life</li> <li>- Oil change warning</li> <li>- Air compressor switch off</li> <li>- Radiator fan speed 3:</li> <li>- Vehicle acceleration</li> <li>- Security holding time</li> <li>- Cylinder 1 knock sensor ZW correction</li> <li>- Cylinder 2 knock sensor ZW correction</li> <li>- Cylinder 3 knock sensor ZW correction</li> <li>- Cylinder 4 knock sensor ZW correction</li> <li>- E-Gas fail safe</li> <li>• <b>Adjustment</b> <ul style="list-style-type: none"> <li>- Throttle valve adaption</li> <li>- Idle running speed programing</li> <li>- Lambda control adaptation</li> </ul> </li> </ul>
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**OPEL** **Corsa [C] - Corsa 1.4 Twinport**

Year	Engine	Liters	HP	System	Functions
2003/09 - 2006/09	Z 14 XEP	1.4	90	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air consumption meter</li> <li>- Air conditioner switching command</li> <li>- Fuel pump relay</li> <li>- Air mass meter voltage</li> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- injection duration</li> <li>- Ignition angle</li> <li>- recommended idle revolutions</li> <li>- Immobilizer</li> <li>- Main relay</li> <li>- Car speed sensor</li> <li>- Radiator fan. stage 2</li> <li>- Service lamp</li> <li>- Ignition</li> <li>- Lambda-control status (bank 1, sensor 1) 1)</li> <li>- Throttle valve memo value</li> <li>- Oil pressure</li> <li>- Fuel fill level signal</li> <li>- Fuel feeding stop</li> <li>- Catalyst protection enrichment (B1)</li> <li>- Full load enrichment</li> <li>- Throttle valve position, Duty cycle</li> <li>- Air conditioner pressure sensor voltage</li> <li>- Throttle valve A, saved idle speed position</li> <li>- Swirl flap position sensor</li> <li>- Oil life</li> <li>- Oil change warning</li> <li>- Air compressor switch off</li> <li>- Radiator fan speed 3:</li> <li>- Vehicle acceleration</li> <li>- Security holding time</li> <li>- Cylinder 1 knock sensor ZW correction</li> <li>- Cylinder 2 knock sensor ZW correction</li> <li>- Cylinder 3 knock sensor ZW correction</li> <li>- Cylinder 4 knock sensor ZW correction</li> <li>- E-Gas fail safe</li> </ul> </li> <li>• <b>Adjustment</b> <ul style="list-style-type: none"> <li>- Throttle valve adaption</li> <li>- Idle running speed programing</li> <li>- Lambda control adaptation</li> </ul> </li> </ul>

OPEL					Corsa [C] - Corsa 1.2i Twinport	
Year	Engine	Liters	HP	System	Functions	
2004/07 - 2006/09	Z 12 XEP	1.2	80	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air consumption meter</li> <li>- Air conditioner switching command</li> <li>- Fuel pump relay</li> <li>- Air mass meter voltage</li> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- injection duration</li> <li>- Ignition angle</li> <li>- recommended idle revolutions</li> <li>- Immobilizer</li> <li>- Main relay</li> <li>- Car speed sensor</li> <li>- Radiator fan. stage 2</li> <li>- Service lamp</li> <li>- Ignition</li> <li>- Lambda-control status (bank 1, sensor 1) 1)</li> <li>- Throttle valve memo value</li> <li>- Oil pressure</li> <li>- Fuel fill level signal</li> <li>- Fuel feeding stop</li> <li>- Catalyst protection enrichment (B1)</li> <li>- Full load enrichment</li> <li>- Throttle valve position, Duty cycle</li> <li>- Air conditioner pressure sensor voltage</li> <li>- Throttle valve A, saved idle speed position</li> <li>- Swirl flap position sensor</li> <li>- Oil life</li> <li>- Oil change warning</li> <li>- Air compressor switch off</li> <li>- Radiator fan speed 3:</li> <li>- Vehicle acceleration</li> <li>- Security holding time</li> <li>- Cylinder 1 knock sensor ZW correction</li> <li>- Cylinder 2 knock sensor ZW correction</li> <li>- Cylinder 3 knock sensor ZW correction</li> <li>- Cylinder 4 knock sensor ZW correction</li> <li>- E-Gas fail safe</li> </ul> </li> <li>• <b>Adjustment</b> <ul style="list-style-type: none"> <li>- Throttle valve adaption</li> <li>- Idle running speed programing</li> <li>- Lambda control adaptation</li> </ul> </li> </ul>	

OPEL					Meriva [A] - Meriva 1.4 i Twinport	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air consumption meter</li> <li>- Air conditioner switching command</li> <li>- Fuel pump relay</li> <li>- Air mass meter voltage</li> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- injection duration</li> <li>- Ignition angle</li> <li>- recommended idle revolutions</li> <li>- Immobilizer</li> <li>- Main relay</li> <li>- Car speed sensor</li> <li>- Radiator fan. stage 2</li> </ul> </li> </ul>	

2004/07 - 2010/03	Z 14 XEP	1.4	90	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> <li>- Service lamp</li> <li>- Ignition</li> <li>- Lambda-control status (bank 1, sensor 1) 1)</li> <li>- Throttle valve memo value</li> <li>- Oil pressure</li> <li>- Fuel fill level signal</li> <li>- Fuel feeding stop</li> <li>- Catalyst protection enrichment (B1)</li> <li>- Full load enrichment</li> <li>- Throttle valve position, Duty cycle</li> <li>- Air conditioner pressure sensor voltage</li> <li>- Throttle valve A, saved idle speed position</li> <li>- Swirl flap position sensor</li> <li>- Oil life</li> <li>- Oil change warning</li> <li>- Air compressor switch off</li> <li>- Radiator fan speed 3:</li> <li>- Vehicle acceleration</li> <li>- Security holding time</li> <li>- Cylinder 1 knock sensor ZW correction</li> <li>- Cylinder 2 knock sensor ZW correction</li> <li>- Cylinder 3 knock sensor ZW correction</li> <li>- Cylinder 4 knock sensor ZW correction</li> <li>- E-Gas fail safe</li> <li>• <b>Adjustment</b> <ul style="list-style-type: none"> <li>- Throttle valve adaption</li> <li>- Idle running speed programing</li> <li>- Lambda control adaptation</li> </ul> </li> </ul>
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OPEL					
Meriva [A] - Meriva 1.6 i OPC Turbo					
Year	Engine	Liters	HP	System	Functions
2005/09 - 2010/03	Z 16 LET	1.6	180	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air consumption meter</li> <li>- Air conditioner switching command</li> <li>- Fuel pump relay</li> <li>- Air mass meter voltage</li> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- injection duration</li> <li>- Ignition angle</li> <li>- recommended idle revolutions</li> <li>- Immobilizer</li> <li>- Main relay</li> <li>- Car speed sensor</li> <li>- Radiator fan. stage 2</li> <li>- Service lamp</li> <li>- Ignition</li> <li>- Lambda-control status (bank 1, sensor 1) 1)</li> <li>- Throttle valve memo value</li> <li>- Oil pressure</li> <li>- Fuel fill level signal</li> <li>- Fuel feeding stop</li> <li>- Catalyst protection enrichment (B1)</li> <li>- Full load enrichment</li> <li>- Throttle valve position, Duty cycle</li> <li>- Air conditioner pressure sensor voltage</li> <li>- Throttle valve A, saved idle speed position</li> <li>- Swirl flap position sensor</li> <li>- Oil life</li> <li>- Oil change warning</li> <li>- Air compressor switch off</li> <li>- Radiator fan speed 3:</li> <li>- Vehicle acceleration</li> <li>- Security holding time</li> <li>- Cylinder 1 knock sensor ZW correction</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Cylinder 2 knock sensor ZW correction</li> <li>- Cylinder 3 knock sensor ZW correction</li> <li>- Cylinder 4 knock sensor ZW correction</li> <li>- E-Gas fail safe</li> <li>• <b>Adjustment</b> <ul style="list-style-type: none"> <li>- Throttle valve adaption</li> <li>- Idle running speed programing</li> <li>- Lambda control adaptation</li> </ul> </li> </ul>
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**OPEL** **Tigra [B] TwinTop - Tigra 1.4i TwinTop**

Year	Engine	Liters	HP	System	Functions
2004/06 - 2009/12	Z 14 XEP	1.4	90	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air consumption meter</li> <li>- Air conditioner switching command</li> <li>- Fuel pump relay</li> <li>- Air mass meter voltage</li> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- injection duration</li> <li>- Ignition angle</li> <li>- recommended idle revolutions</li> <li>- Immobilizer</li> <li>- Main relay</li> <li>- Car speed sensor</li> <li>- Radiator fan. stage 2</li> <li>- Service lamp</li> <li>- Ignition</li> <li>- Lambda-control status (bank 1, sensor 1) 1)</li> <li>- Throttle valve memo value</li> <li>- Oil pressure</li> <li>- Fuel fill level signal</li> <li>- Fuel feeding stop</li> <li>- Catalyst protection enrichment (B1)</li> <li>- Full load enrichment</li> <li>- Throttle valve position, Duty cycle</li> <li>- Air conditioner pressure sensor voltage</li> <li>- Throttle valve A, saved idle speed position</li> <li>- Swirl flap position sensor</li> <li>- Oil life</li> <li>- Oil change warning</li> <li>- Air compressor switch off</li> <li>- Radiator fan speed 3:</li> <li>- Vehicle acceleration</li> <li>- Security holding time</li> <li>- Cylinder 1 knock sensor ZW correction</li> <li>- Cylinder 2 knock sensor ZW correction</li> <li>- Cylinder 3 knock sensor ZW correction</li> <li>- Cylinder 4 knock sensor ZW correction</li> <li>- E-Gas fail safe</li> </ul> </li> <li>• <b>Adjustment</b> <ul style="list-style-type: none"> <li>- Throttle valve adaption</li> <li>- Idle running speed programing</li> <li>- Lambda control adaptation</li> </ul> </li> </ul>

[4007 \[I3\] - 4007 2.2 HDi 4x4](#)  
[407 \[D2\] Coupe - 407 3.0 HDi 24V Coupe](#)  
[806 \[U60\] - 806 1.9 Diesel Turbo](#)  
[806 \[U60\] - 806 2.1 Diesel Turbo](#)  
[806 \[U60\] - 806 2.0 HDi](#)  
[807 \[V2\] - 807 2.0 HDi](#)  
[807 \[V2\] - 807 2.2 HDi](#)  
[Bipper \[A9\] - Bipper 1.4 HDi](#)  
[Bipper \[A9\] - Bipper 1.4](#)  
[Bipper \[A9\] - Bipper 1.3 HDi](#)  
[Boxer - Boxer 2.8 HDi](#)  
[Boxer - Boxer 2.3 D](#)  
[Boxer \[U9\] - Boxer 2.2 HDi](#)  
[Boxer \[U9\] - Boxer 3.0 HDi](#)  
[Expert \[G9\] - Expert 2.0 HDi](#)  
[Expert \[G9\] - Expert 1.6 HDi](#)  
[Expert \[U64\] - Expert 1.9 Diesel](#)  
[Expert \[U64\] - Expert 1.9 Diesel Turbo](#)  
[Expert \[U64\] - Expert 1.6i](#)  
[Expert \[U64\] - Expert 1.8i](#)  
[Expert \[U64\] - Expert 2.0 HDi](#)  
[Expert \[U64\] - Expert 2.0i 16V](#)  
[Partner \[M5\] - Partner 1.1i](#)  
[Partner \[M5\] - Partner 1.4i](#)  
[Partner \[M5\] - Partner 1.6i 16V](#)  
[Partner \[M5\] - Partner 1.9 Diesel](#)  
[Partner \[M5\] - Partner 2.0 HDi](#)  
[Partner \[M5\] - Partner 1.6 HDi](#)

Year	Engine	Liters	HP	System	Functions
2007/09 -	4HN	2.2	156	Engine control Diesel EDC 16CP39 MIT	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Quantities comparison</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Injector quantity adjustment</li> <li>- Exhaust gas recirculation control unit</li> <li>- Reset Lambda sensor adaptation values</li> <li>- Rest of particle filter adaption values</li> <li>- HFM adaption reset</li> <li>- Reset DPF adaptation parameters</li> <li>- Reset additive level</li> <li>- Filling of additive tank</li> <li>- Adapt air mass meter</li> <li>- Reset turbocharger adaption values</li> <li>- Exhaust gas recirculation valve basic setting</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Actual value particle filter</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Quantity correction for cylinder 1</li> <li>- Quantity correction for cylinder 2</li> <li>- Quantity correction for cylinder 3</li> <li>- Quantity correction for cylinder 4</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Coolant temperature</li> <li>- Exhausted gases recirculation system</li> <li>- Battery voltage</li> <li>- Engine revolution</li> <li>- atmospheric pressure</li> <li>- Exhaust gas recirculation control</li> <li>- cruise control switch</li> <li>- valve, exhausted gases recirculation</li> <li>- Pressure control turbo charger</li> <li>- Immobilizer</li> <li>- Regulator, exhausted gases recirculation (ARF)</li> <li>- fan relay</li> <li>- Rail pressure, nominal</li> <li>- Rail pressure, actual</li> <li>- Air mass, nominal value</li> <li>- Air mass, actual value</li> <li>- Turbo pressure, nominal value</li> <li>- Turbo pressure, actual value</li> <li>- Intake air temperature</li> <li>- Brake pedal switch</li> <li>- Acceleration pedal position sensor 1</li> <li>- Acceleration pedal position sensor 2</li> <li>- Brake pedal switch (redundancy)</li> <li>- Engine oil pressure signal</li> <li>- Tempomat speed (required value)</li> <li>- Radiator fan control</li> <li>- Cooling agent pressure</li> <li>- Exhausted gases recirculation valve position (EGR) <ul style="list-style-type: none"> <li>- Additive minimum level</li> <li>- Injected amount of additive</li> <li>- Correction, Injection time</li> <li>- DPF temperature</li> <li>- VGT (variable turbine geometry) Control Status</li> <li>- Time with critical exhaust temperature</li> </ul> </li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Time with critical piston temperature</li> <li>- Particulate filter contamination level</li> <li>- Estimated remaining HDP operating time</li> <li>- High-pressure pump running time with excessive pressure</li> <li>- Number of electronic control unit programming</li> <li>- Clutch pedal</li> <li>- Exhaust gas recirculation Position Actual Value</li> <li>- Exhaust gas recirculation Position Target Value</li> <li>- Ash content particle filter</li> <li>- Injected quantity (total)</li> <li>- Cooling agent compressor request</li> <li>- Radiator fan controller target value</li> <li>- Particle filter differential pressure</li> <li>- Intake air temperature 2</li> <li>- Cylinder 1 injector voltage</li> <li>- Cylinder 2 injector voltage</li> <li>- Cylinder 3 injector voltage</li> <li>- Cylinder 4 injector voltage</li> <li>- Mileage (km) since regeneration</li> <li>- Calculated remaining mileage in km</li> <li>- Status speed control</li> <li>- Average time last 5 regenerations</li> <li>- Fuel high pressure control/quantity control</li> <li>- Idle speed control long term adjustment</li> <li>- Additive reservoir</li> <li>- Suction control valve control current nominal value</li> <li>- Suction control valve control current actual value</li> <li>- Distance from the last DPF change</li> <li>- Particle filter quality</li> <li>- Additive system status</li> <li>- Residual additive quantity</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- fan for blowing radiator control</li> <li>- turbo charger regulating valve</li> <li>- exhausted gases recirculation solenoid</li> <li>- warming up relay</li> <li>- Engine oil sensor</li> <li>- Suction control valve</li> <li>- Fuel pressure controller</li> <li>- Bypass valve of the exhaust gas recirculation cooler</li> <li>- Additive delivery pump</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Quantities comparison</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Injector quantity adjustment</li> <li>- Exhaust gas recirculation control unit</li> <li>- Reset Lambda sensor adaptation values</li> <li>- Rest of particle filter adaption values</li> <li>- HFM adaption reset</li> <li>- Reset DPF adaptation parameters</li> <li>- Reset additive level</li> <li>- Filling of additive tank</li> <li>- Adapt air mass meter</li> <li>- Reset turbocharger adaption values</li> <li>- Exhaust gas recirculation valve basic setting</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Actual value particle filter</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Air compressor request</li> <li>- Quantity correction for cylinder 1</li> </ul> </li> </ul>

2010/06  
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Engine control  
Diesel EDC 16CP39 MIT

- Quantity correction for cylinder 2
- Quantity correction for cylinder 3
- Quantity correction for cylinder 4
- Vehicle driving speed
- Accelerator pedal position
- Fuel temperature
- Coolant temperature
- Exhausted gases recirculation system
- Battery voltage
- Engine revolution
- atmospheric pressure
- Exhaust gas recirculation control
- cruise control switch
- valve, exhausted gases recirculation
- Pressure control turbo charger
- Immobilizer
- Regulator, exhausted gases recirculation (ARF)
- fan relay
- Rail pressure, nominal
- Rail pressure, actual
- Air mass, nominal value
- Air mass, actual value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Brake pedal switch
- Acceleration pedal position sensor 1
- Acceleration pedal position sensor 2
- Brake pedal switch (redundancy)
- Engine oil pressure signal
- Tempomat speed (required value)
- Radiator fan control
- Cooling agent pressure
- Exhausted gases recirculation valve position (EGR)
- Additive minimum level
- Injected amount of additive
- Correction, Injection time
- DPF temperature
- VGT (variable turbine geometry) Control Status
- Time with critical exhaust temperature
- Time with critical piston temperature
- Particulate filter contamination level
- Estimated remaining HDP operating time
- High-pressure pump running time with excessive pressure
- Number of electronic control unit programming
- Clutch pedal
- Exhaust gas recirculation Position Actual Value
- Exhaust gas recirculation Position Target Value
- Ash content particle filter
- Injected quantity (total)
- Cooling agent compressor request
- Radiator fan controller target value
- Particle filter differential pressure
- Intake air temperature 2
- Cylinder 1 injector voltage
- Cylinder 2 injector voltage
- Cylinder 3 injector voltage
- Cylinder 4 injector voltage
- Mileage (km) since regeneration
- Calculated remaining mileage in km
- Status speed control
- Average time last 5 regenerations
- Fuel high pressure control/quantity control
- Idle speed control long term adjustment
- Additive reservoir
- Suction control valve control current nominal

					<ul style="list-style-type: none"> <li>value</li> <li>- Suction control valve control current actual value</li> <li>- Distance from the last DPF change</li> <li>- Particle filter quality</li> <li>- Additive system status</li> <li>- Residual additive quantity</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- fan for blowing radiator control</li> <li>- turbo charger regulating valve</li> <li>- exhausted gases recirculation solenoid</li> <li>- warming up relay</li> <li>- Engine oil sensor</li> <li>- Suction control valve</li> <li>- Fuel pressure controller</li> <li>- Bypass valve of the exhaust gas recirculation cooler</li> <li>- Additive delivery pump</li> </ul> </li> </ul>
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<b>PEUGEOT</b>	<b>407 [D2] Coupe - 407 3.0 HDi 24V Coupe</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Quantities comparison</li> <li>- Particulate filter temperature evaluation</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Read configuration</li> <li>- Injector quantity adjustment</li> <li>- Exhaust gas recirculation control unit</li> <li>- Restoration of adaptation values of the exhaust gas recirculation <ul style="list-style-type: none"> <li>- Reset Lambda sensor adaptation values</li> <li>- Reset after replacement of additive filter</li> <li>- Reset, exhaust gas recirculation, solenoid valve, bank 1</li> <li>- Reset, exhaust gas recirculation, solenoid valve, bank 2</li> </ul> </li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Actual value particle filter</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Transmission type</li> <li>- Quantity correction for cylinder 1</li> <li>- Quantity correction for cylinder 2</li> <li>- Quantity correction for cylinder 3</li> <li>- Quantity correction for cylinder 4</li> <li>- Quantity correction for cylinder 5</li> <li>- Quantity correction for cylinder 6</li> <li>- Vehicle driving speed</li> <li>- Engine oil pressure</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Status immobilizer</li> <li>- Coolant temperature</li> <li>- air conditioner/compressor readiness signal</li> <li>- Engine revolution</li> <li>- atmospheric pressure</li> <li>- Gear engaged</li> <li>- oxygen sensor voltage</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>

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Engine control  
Diesel EDC 17CP11

- Oxygen sensor warm-up
- Control unit power supply
- signal, brake switch
- recommended idle revolutions
- fuel-air mixture
- Engine status
- ignition blocking signal
- Main relay
- turbo charger regulating valve
- turbo charger regulating valve
- engine oil temperature
- actual value of moment motor
- stop lights switch
- injected fuel quantity
- camshaft with crank shaft engagement
- Additional heating relay
- Rail pressure, nominal
- Rail pressure, actual
- Turbo pressure, nominal value
- Turbo pressure, actual value
- CAN: front axle speed
- Starter activation
- CAN message, engine revolutions signal
- Fan 1 control
- Brake pedal switch
- Acceleration pedal position sensor 1
- Acceleration pedal position sensor 2
- Cruise control: variable speed limiting
- Fuel quantity metering device pulse-duty factor
- Variable speed limit
- Cooling agent pressure sensor
- Full throttle gas pedal position
- Brake pedal switch (redundancy)
- Start permission
- Wheel acceleration
- System in fail safe
- Cooling agent temperature control light
- Tempomat speed (required value)
- Charging-air pressure magnetic valve 2
- Fuel level minimum
- Cooling agent pressure
- Control unit status
- Immobilizer status
- Additive minimum level
- Injected amount of additive
- Particle filter output temperature
- Drive current, high-pressure pump
- Ancillaries status signal
- DPF remaining mileage can be read out
- Particulate filter contamination level
- Alternator regulator
- Number of terminated DPF regenerations
- Tank fill level via CAN
- Radiator fan triggering actual value
- Electr. supplem. heater actuation
- Exhaust gas recirculation Position Actual Value
- Exhaust gas recirculation Position Target Value
- Ash content particle filter
- Distance since last regeneration
- Adaptation for exhaust gas recirculation, bank 1
- Adaptation for exhaust gas recirculation, bank 2
- Calculated fuel quantity in oil
- Exhaust gas recirculation position actual value, bank 2
- Metering unit duty cycle, specified value
- Boost pressure control status bank 1
- Boost pressure control status, bank 2
- Additive tank first filling

					<ul style="list-style-type: none"> <li>- Time until rail pressure attained</li> <li>- Fuel metering unit duty cycle</li> <li>- Final compression</li> <li>- Final compression temperature</li> <li>- Cooling agent compressor request</li> <li>- Exhaust gas temperature before particle filter</li> <li>- Particle filter differential pressure</li> <li>- Initialization</li> <li>- Radiator fan request air-conditioner</li> <li>- CAN message - coolant temperature</li> <li>- Intake air temperature 2</li> <li>- AGR cooling solenoid valve</li> <li>- Status Particle filter-Regeneration</li> <li>- Particle filter temperature</li> <li>- Status Wake-Up Signal</li> <li>- Driver input torque</li> <li>- Conditions for DPF-Regeneration</li> <li>- Intake air, temperature 1</li> <li>- Status Tempomat</li> <li>- Carbon black content Particle filter</li> <li>- EGR adaption mode status</li> <li>- Additive reservoir</li> <li>- Average mileage between regenerations</li> <li>- Power loss</li> <li>- Engine oil temperature sensor</li> <li>- Time from last regeneration</li> <li>- Distance from the last DPF change</li> <li>- Particle filter quality</li> <li>- Residual additive quantity</li> <li>- Charge pressure actuator 2 actual position</li> <li>- Charge pressure actuator 2 specified position</li> <li>- Turbocharger boost pressure valve, set value</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Air pressure in intake manifold</li> <li>- Oxygen sensor</li> <li>- circuit compressor control</li> <li>- exhausted gases recirculation control circuit</li> <li>- interference engine</li> <li>- Air mass meter signal</li> <li>- exhausted gases recirculation solenoid 1</li> <li>- exhausted gases recirculation solenoid 2</li> <li>- Main relay</li> <li>- warming up relay</li> <li>- Additional heater</li> <li>- Suction control valve</li> <li>- Fuel pressure controller</li> <li>- Charging-air pressure controller 1</li> <li>- Charging-air pressure controller 2</li> <li>- Radiator fan high speed</li> <li>- Radiator fan: medium speed</li> <li>- Exhaust gas recirculation control unit</li> <li>- Bypass valve of the exhaust gas recirculation cooler</li> </ul> </li> </ul>
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PEUGEOT					806 [U60] - 806 1.9 Diesel Turbo	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> </ul> </li> </ul>	



1994/12 - 2002/08	DHX	1.9	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supple./auxiliary heater fuel pump</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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PEUGEOT						806 [U60] - 806 2.1 Diesel Turbo					
Year	Engine	Liters	HP	System		Functions					
1996/04 - 2000/08	P8C	2.1	109 - 110	Heating / Air conditioner Auxiliary/supplementary heater 1.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supple./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>					

PEUGEOT						806 [U60] - 806 2.0 HDi					
Year	Engine	Liters	HP	System		Functions					
1999/08 - 2002/08	RHZ	2.0	109	Heating / Air conditioner Auxiliary/supplementary heater 1.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supple./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> </ul> </li> </ul>					

					<ul style="list-style-type: none"> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
2000/06 - 2002/08	RHW	2.0	110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

PEUGEOT					
807 [V2] - 807 2.0 HDi					
Year	Engine	Liters	HP	System	Functions
2002/06 - 2006/12	RHW	2.0	110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> </ul> </li> </ul>

2006/03 - 2010/05	RHK	2.0	120	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> <ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
2006/06 - 2010/05	RHR	2.0	136	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
2010/06 -	RHH	2.0	163	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

PEUGEOT				807 [V2] - 807 2.2 HDi	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

2002/06 - 2006/07	4HW	2.2	128	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
2007/09 - 2010/05	4H...	2.2	163 - 170	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

PEUGEOT Bipper [A9] - Bipper 1.4 HDi					
Year	Engine	Liters	HP	System	Functions
2008/02 -	8HS	1.4	68	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

PEUGEOT Bipper [A9] - Bipper 1.4					
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Year	Engine	Liters	HP	System	Functions
2008/02 -	KFV	1.4	73	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>
2010/04 -	KFT	1.4	73	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

PEUGEOT Bipper [A9] - Bipper 1.3 HDi					
Year	Engine	Liters	HP	System	Functions
2010/08 -	FHZ	1.3	75	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> </ul> </li> </ul>

PEUGEOT Boxer - Boxer 2.8 HDi					
Year	Engine	Liters	HP	System	Functions
2005/09 - 2009/09	8140 43s	2.8	127	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

PEUGEOT Boxer - Boxer 2.3 D					
Year	Engine	Liters	HP	System	Functions

Year	Engine	Liters	HP	System	Functions
2009/10 - 2012/02	F1A	2.3	127	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

PEUGEOT					
Boxer [U9] - Boxer 2.2 HDi					
Year	Engine	Liters	HP	System	Functions
2006/06 -	4HV	2.2	101	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
2010/07 -	4HM	2.2	129	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
2011/06 -	4HG	2.2	110	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

PEUGEOT					
Boxer [U9] - Boxer 3.0 HDi					
Year	Engine	Liters	HP	System	Functions

2006/06 -	F1CE...	3.0	158	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
2010/01 -	F1CE3481N	3.0	146	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
2010/04 -	F1CE3481D	3.0	156	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>
2011/03 -	F1CE3481E	3.0	177	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Configuration save</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Reverse gear</li> <li>- Trailer operation</li> <li>- Number of electronic control unit programming</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

PEUGEOT					Expert [G9] - Expert 2.0 HDi
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> </ul> </li> </ul>

2007/02 -	RH...	2.0	120	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
2010/04 -	RHH	2.0	163	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>

PEUGEOT					
Expert [G9] - Expert 1.6 HDi					
Year	Engine	Liters	HP	System	Functions
2007/02 -	9HU	1.6	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> </ul>



- Fuel metering valve

PEUGEOT Expert [U64] - Expert 1.9 Diesel					
Year	Engine	Liters	HP	System	Functions
1995/09 - 2000/05	D9B	1.9	69 - 71	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
1998/06 - 2001/08	WJZ	1.9	69	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
2001/09 - 2007/01	WJY	1.9	71	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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PEUGEOT Expert [U64] - Expert 1.9 Diesel Turbo					
Year	Engine	Liters	HP	System	Functions
1995/09 - 2000/05	DHX	1.9	90 - 92	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

PEUGEOT Expert [U64] - Expert 1.6i					
Year	Engine	Liters	HP	System	Functions
1995/09 - 2000/05	220 A2.000	1.6	80	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

PEUGEOT		Expert [U64] - Expert 1.8i			
Year	Engine	Liters	HP	System	Functions
1996/09 - 2007/01	L6B	1.8	95	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

PEUGEOT		Expert [U64] - Expert 2.0 HDi			
Year	Engine	Liters	HP	System	Functions
1999/10 - 2007/01	RHZ	2.0	109	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> </ul> </li> </ul>

2000/06 - 2007/01	RHW	2.0	110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supple./auxiliary heater fuel pump</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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PEUGEOT						Expert [U64] - Expert 2.0i 16V	
Year	Engine	Liters	HP	System	Functions		
2000/03 - 2007/01	RFN	2.0	136	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supple./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>		

PEUGEOT						Partner [M5] - Partner 1.1i	
Year	Engine	Liters	HP	System	Functions		
2002/09 - 2005/10	HFX	1.1	60	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supple./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> </ul> </li> </ul>		

					<ul style="list-style-type: none"> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul>
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PEUGEOT Partner [M5] - Partner 1.4i					
Year	Engine	Liters	HP	System	Functions
2002/09 - 2008/04	KFW	1.4	75	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

PEUGEOT Partner [M5] - Partner 1.6i 16V					
Year	Engine	Liters	HP	System	Functions
2002/09 - 2008/04	NFU	1.6	109	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

PEUGEOT Partner [M5] - Partner 1.9 Diesel					
Year	Engine	Liters	HP	System	Functions

2002/09 - 2007/03	WJY	1.9	71	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
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PEUGEOT					Partner [M5] - Partner 2.0 HDi	
Year	Engine	Liters	HP	System	Functions	
2002/09 - 2006/07	RHY	2.0	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>	

PEUGEOT					Partner [M5] - Partner 1.6 HDi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> </ul> </li> </ul>	

2005/09 - 2008/04	9HX	1.6	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>
2005/07 - 2008/04	9HW	1.6	75	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Control unit power supply</li> <li>- Status of park heater</li> <li>- CO-Value</li> <li>- Turbine wheel status</li> </ul> </li> <li>- Combustion air blower actuation</li> <li>- Auxiliary heating request</li> <li>- Flame detection</li> <li>- Fuel dosing pump</li> <li>- Glow element duty cycle</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Detonation unit warming plug</li> <li>- Pump, hot water</li> <li>- Stationary heating: warming up</li> <li>- Combustion air blower</li> <li>- Fuel dosing pump</li> <li>- Fuel metering valve</li> </ul> </li> </ul>

[Alhambra \[710\] - Alhambra 1.4 TSI](#)  
[Alhambra \[710\] - Alhambra 2.0 TDI](#)  
[Alhambra \[710\] - Alhambra 2.0 TSI](#)  
[Alhambra \[710\] - Alhambra 2.0 TDI 4WD](#)  
[Alhambra \[710\] - Alhambra 1.8 TSI](#)  
[Altea Freetrack \[5P5, 5P8\] - Altea Freetrack 1.4 TSI](#)  
[Altea \[5P1\] - Altea 1.4 TSI](#)  
[Ibiza \[6J1\] SC - Ibiza SC 1.4 TSI](#)  
[Ibiza \[6J1\] SC - Ibiza SC 1.4 TSI Cupra](#)  
[Ibiza \[6J5\] - Ibiza 1.4 TSI](#)  
[Ibiza \[6J8\] ST - Ibiza ST 1.4 TSI](#)  
[Leon \[1P1\] - Leon 1.8 TSI](#)  
[Leon \[1P1\] - Leon 2.0 TDI](#)  
[Leon \[1P1\] - Leon 2.0 FSI](#)  
[Leon \[1P1\] - Leon 2.0 TFSI](#)  
[Leon \[1P1\] - Leon 2.0 TFSI Cupra](#)  
[Leon \[1P1\] - Leon 1.6](#)  
[Leon \[1P1\] - Leon 1.6 TDI](#)  
[Leon \[1P1\] - Leon 1.4](#)  
[Leon \[1P1\] - Leon 1.2 TSI](#)  
[Leon \[5F1\] - Leon 1.4 TSI](#)  
[Leon \[5F1\] - Leon 1.2 TSI](#)  
[Leon \[5F1\] - Leon 1.6 TDI](#)  
[Leon \[5F1\] - Leon 2.0 TDI](#)  
[Leon \[5F5\] - Leon SC 1.2 TSI](#)  
[Toledo \[KG3\] - Toledo 1.4 TSI](#)  
[Toledo \[KG3\] - Toledo 1.2](#)  
[Toledo \[KG3\] - Toledo 1.2 TSI](#)  
[Toledo \[KG3\] - Toledo 1.6 TDI](#)  
[Toledo \[KG3\] - Toledo 1.6](#)



Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> <li>- Evaporative emission control regeneration valve</li> <li>- Camshaft timing control (B1), inlet</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Basic adjustment throttle valve</li> <li>- Activate/deactivate cruise control</li> <li>- Compressor magnetic clutch basic setting</li> <li>- Compressor control flap basic setting</li> <li>- Activate/deactivate passenger compartment supplementary heater</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Bleeding fuel system</li> <li>- Fuel pressure reduction</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pressure</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Battery voltage</li> <li>- Fuel consumption</li> <li>- Ignition angle reduction: cyl. 1</li> <li>- Ignition angle reduction: cyl. 2</li> <li>- Ignition angle reduction: cyl. 3</li> <li>- Ignition angle reduction: cyl. 4</li> <li>- Engine revolution</li> <li>- Transverse acceleration</li> <li>- Inserted gear</li> <li>- Engine status</li> <li>- Nominal parameters throttle valve</li> <li>- engine oil temperature</li> <li>- Air mass, nominal value</li> <li>- Turbo pressure, nominal value</li> <li>- Turbo pressure, actual value</li> <li>- Intake air temperature</li> <li>- Engine oil level</li> <li>- Torque limitation</li> <li>- Oxygen sensor voltage (bank 1-sensor 1)</li> <li>- Oxygen sensor voltage (bank 1-sensor 2)</li> <li>- Set value, high fuel pressure</li> <li>- Fuel level (quantity)</li> <li>- Short-term mixture correction, bank 1</li> <li>- Long-term mixture correction, bank 1</li> <li>- Cooling agent temperature motor</li> <li>- Idle running speed target value</li> <li>- Gas pedal position sensor 1 Voltage</li> <li>- Gas pedal position sensor 2 Voltage</li> <li>- Longitudinal acceleration</li> <li>- Rate correction factor</li> <li>- Tempomat speed (required value)</li> <li>- Lambda probe heating resistance (B1, S1)</li> <li>- Lambda probe heating resistance (B1, S2)</li> <li>- Radiator fan 1 control</li> <li>- "Oil minimum" warning</li> <li>- Engine torque</li> </ul> </li> </ul>

Engine control  
Motronic MED 17.5 UDS

- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:  
number
  - Oxygen sensor (b1,s2): Ri limit value
  - Oxygen sensor (b1,s1): characteristics offset
  - Oxygen sensor (b1,S1) fast offset adaptation:  
counter
    - Oxygen sensor (b1,s1): Ceramics temperature
    - Oxygen sensor ageing check (S2): result
    - Operating instructions
    - Catalytic converter O2 capacity: measured
    - Catalytic converter O2 capacity: ageing corr.  
factor
      - Throttle valve position: absolute
      - Throttle valve position: standardised
      - Ambient air pressure
      - Conversion check: Measured value
      - Conversion check: Result
      - Torque loss adaption
      - Throttle valve adaption: Result
      - Short-term throttle valve adaption to air mass  
meter
        - Air leakage
        - Long-term throttle valve adaptation to air mass  
meter
          - Charge-air pressure control: set value

- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2

2010/05 - 2012/05	CAVA	1.4	150	<ul style="list-style-type: none"> <li>- Knock sensor voltage Cylinder 3</li> <li>- Knock sensor voltage Cylinder 4</li> <li>- CAM: Deviation from reference position</li> <li>- Magnetic clutch actuation duty cycle</li> <li>- A/C compressor refrigerant pressure</li> <li>- Compressor control flap: actual/specified angle difference</li> <li>- ESP reduced required torque</li> <li>- ESP increased required torque</li> <li>- Oxygen sensor heating (B1, S1), actuation</li> <li>- Oxygen sensor heating (B1, S2), actuation</li> <li>- Fuel low pressure: Adaptation value</li> <li>- Drive specified torque</li> <li>- Crankshaft specified torque</li> <li>- Lambda control (b1): Part load adaptation value</li> <li>- Brake booster pressure raw value</li> <li>- Temperature sensor 1 compressor 2, raw value</li> <li>- Dew point, heat quantity (b1,s1), model value</li> <li>- Dew point, heat quantity (b1,s2), model value</li> <li>- Dew point end, counter start (b1,s1)</li> <li>- Dew point end, counter start (b1,s2)</li> <li>- Brake booster pressure actual value</li> <li>- Pressure upstream of charging module, raw value</li> <li>- Brake booster pump test: Result</li> <li>- Lateral acceleration raw value</li> <li>- Intake manifold intake air temperature, raw value</li> <li>- Intake air temperature upstream of throttle valve: raw value</li> <li>- Time since terminal 15 off</li> <li>- Combustion chamber air charge: Set value</li> <li>- Brake booster vacuum</li> <li>- Travel time with MIL activated</li> <li>- Brake booster vacuum pump</li> <li>- Lambda control deactivation</li> <li>- Exh. gas temperat. sensor (bank 1, sensor 1)</li> <li>- Camshaft speed</li> <li>- Throttle valve position 2</li> <li>- Missfire detection counter Cylinder 1</li> <li>- Missfire detection counter Cylinder 2</li> <li>- Missfire detection counter Cylinder 3</li> <li>- Missfire detection counter Cylinder 4</li> <li>- Coolant temp. at engine start</li> <li>- Magnetic clutch monitoring</li> <li>- Temperature sensor downstream of radiator: Raw voltage</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- Turbo charger air circulation valve</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Fuel quantity control valve</li> <li>- Radiator fan controller 1</li> <li>- Electric fuel pump control unit</li> <li>- Compressor control flap</li> <li>- Aux coolant pump</li> <li>- Evaporative emission control regeneration valve</li> <li>- Wastegate solenoid valve</li> <li>- Actuator structure-borne noise</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> </ul> </li> </ul>				

- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded

Tire control system  
Tire pressure monitor 4.0

- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded

				<ul style="list-style-type: none"> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> <li>- Evaporative emission control regeneration valve</li> <li>- Camshaft timing control (B1), inlet</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Basic adjustment throttle valve</li> <li>- Activate/deactivate cruise control</li> <li>- Compressor magnetic clutch basic setting</li> <li>- Compressor control flap basic setting</li> <li>- Activate/deactivate passenger compartment supplementary heater</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Bleeding fuel system</li> <li>- Fuel pressure reduction</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pressure</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> </ul> </li> </ul>

- Battery voltage
- Fuel consumption
- Ignition angle reduction: cyl. 1
- Ignition angle reduction: cyl. 2
- Ignition angle reduction: cyl. 3
- Ignition angle reduction: cyl. 4
- Engine revolution
- Transverse acceleration
- Inserted gear
- Engine status
- Nominal parameters throttle valve
- engine oil temperature
- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status



Engine control  
Motronic MED 17.5 UDS

- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:  
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:  
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.  
factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass  
meter
- Air leakage
- Long-term throttle valve adaptation to air mass  
meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque  
power loss
- Ignition angle retard: mean value

2011/06  
-  
2012/05

CNWB

1.4

150

- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum

- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed
- Throttle valve position 2
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Coolant temp. at engine start
- Magnetic clutch monitoring
- Temperature sensor downstream of radiator:

Raw voltage

**• Actuators**

- Air conditioner electromagnetic clutch - compressor
- Turbo charger air circulation valve
- Inlet camshaft timing control (bank 1)
- Fuel quantity control valve
- Radiator fan controller 1
- Electric fuel pump control unit
- Compressor control flap
- Aux coolant pump
- Evaporative emission control regeneration valve
- Wastegate solenoid valve
- Actuator structure-borne noise

**• Identification**

**• Clear errors**

**• Adjustments / settings**

- Tire pressure monitor individual specified pressure adjustment

**• Error memory**

**• Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6

Tire control system  
Tire pressure monitor 4.0

- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded

- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure

				<ul style="list-style-type: none"> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> <li>- Evaporative emission control regeneration valve</li> <li>- Camshaft timing control (B1), inlet</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Basic adjustment throttle valve</li> <li>- Activate/deactivate cruise control</li> <li>- Compressor magnetic clutch basic setting</li> <li>- Compressor control flap basic setting</li> <li>- Activate/deactivate passenger compartment supplementary heater</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Bleeding fuel system</li> <li>- Fuel pressure reduction</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pressure</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Battery voltage</li> <li>- Fuel consumption</li> <li>- Ignition angle reduction: cyl. 1</li> <li>- Ignition angle reduction: cyl. 2</li> <li>- Ignition angle reduction: cyl. 3</li> <li>- Ignition angle reduction: cyl. 4</li> <li>- Engine revolution</li> <li>- Transverse acceleration</li> <li>- Inserted gear</li> <li>- Engine status</li> <li>- Nominal parameters throttle valve</li> <li>- engine oil temperature</li> <li>- Air mass, nominal value</li> <li>- Turbo pressure, nominal value</li> <li>- Turbo pressure, actual value</li> <li>- Intake air temperature</li> <li>- Engine oil level</li> <li>- Torque limitation</li> <li>- Oxygen sensor voltage (bank 1-sensor 1)</li> <li>- Oxygen sensor voltage (bank 1-sensor 2)</li> <li>- Set value, high fuel pressure</li> <li>- Fuel level (quantity)</li> <li>- Short-term mixture correction, bank 1</li> <li>- Long-term mixture correction, bank 1</li> <li>- Cooling agent temperature motor</li> <li>- Idle running speed target value</li> <li>- Gas pedal position sensor 1 Voltage</li> <li>- Gas pedal position sensor 2 Voltage</li> <li>- Longitudinal acceleration</li> <li>- Rate correction factor</li> <li>- Tempomat speed (required value)</li> <li>- Lambda probe heating resistance (B1, S1)</li> </ul> </li> </ul>

- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:  
number
  - Oxygen sensor (b1,s2): Ri limit value
  - Oxygen sensor (b1,s1): characteristics offset
  - Oxygen sensor (b1,S1) fast offset adaptation:  
counter
    - Oxygen sensor (b1,s1): Ceramics temperature
    - Oxygen sensor ageing check (S2): result
    - Operating instructions
    - Catalytic converter O2 capacity: measured
    - Catalytic converter O2 capacity: ageing corr.  
factor
      - Throttle valve position: absolute
      - Throttle valve position: standardised
      - Ambient air pressure
      - Conversion check: Measured value
      - Conversion check: Result
      - Torque loss adaption
      - Throttle valve adaption: Result
      - Short-term throttle valve adaption to air mass  
meter

Engine control  
Motronic MED 17.5 UDS

- Air leakage
- Long-term throttle valve adaptation to air mass meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle



2012/05

CTHA

1.4

150

- Accelerator pedal: limitation
  - Throttle valve air mass flow
  - Knock sensor voltage Cylinder 1
  - Knock sensor voltage Cylinder 2
  - Knock sensor voltage Cylinder 3
  - Knock sensor voltage Cylinder 4
  - CAM: Deviation from reference position
  - Magnetic clutch actuation duty cycle
  - A/C compressor refrigerant pressure
  - Compressor control flap: actual/specified angle difference
  - ESP reduced required torque
  - ESP increased required torque
  - Oxygen sensor heating (B1, S1), actuation
  - Oxygen sensor heating (B1, S2), actuation
  - Fuel low pressure: Adaptation value
  - Drive specified torque
  - Crankshaft specified torque
  - Lambda control (b1): Part load adaptation value
  - Brake booster pressure raw value
  - Temperature sensor 1 compressor 2, raw value
  - Dew point, heat quantity (b1,s1), model value
  - Dew point, heat quantity (b1,s2), model value
  - Dew point end, counter start (b1,s1)
  - Dew point end, counter start (b1,s2)
  - Brake booster pressure actual value
  - Pressure upstream of charging module, raw value
  - Brake booster pump test: Result
  - Lateral acceleration raw value
  - Intake manifold intake air temperature, raw value
  - Intake air temperature upstream of throttle valve: raw value
  - Time since terminal 15 off
  - Combustion chamber air charge: Set value
  - Brake booster vacuum
  - Travel time with MIL activated
  - Brake booster vacuum pump
  - Lambda control deactivation
  - Exh. gas temperat. sensor (bank 1, sensor 1)
  - Camshaft speed
  - Throttle valve position 2
  - Missfire detection counter Cylinder 1
  - Missfire detection counter Cylinder 2
  - Missfire detection counter Cylinder 3
  - Missfire detection counter Cylinder 4
  - Coolant temp. at engine start
  - Magnetic clutch monitoring
  - Temperature sensor downstream of radiator:
- Raw voltage
- **Actuators**
    - Air conditioner electromagnetic clutch - compressor
    - Turbo charger air circulation valve
    - Inlet camshaft timing control (bank 1)
    - Fuel quantity control valve
    - Radiator fan controller 1
    - Electric fuel pump control unit
    - Compressor control flap
    - Aux coolant pump
    - Evaporative emission control regeneration valve
    - Wastegate solenoid valve
    - Actuator structure-borne noise

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Tire pressure monitor individual specified

pressure adjustment

• **Error memory**

• **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded

Tire control system  
Tire pressure monitor 4.0

- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded

					<ul style="list-style-type: none"> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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SEAT					Alhambra [710] - Alhambra 2.0 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> </ul> </li> </ul>	

- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded

2010/05 -	CFFB	2.0	140	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> </ul>
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				<ul style="list-style-type: none"> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> </ul> </li> </ul>

2011/05  
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CFFE

2.0

116

Tire control system  
Tire pressure monitor 4.0

- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded



- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure

				<ul style="list-style-type: none"> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature</li> </ul> </li> </ul>

2012/11  
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CFGC

2.0

177

Tire control system  
Tire pressure monitor 4.0

received

- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded

					<ul style="list-style-type: none"> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code received</li> <li>- Tire pressure sensor 4: Actual pressure</li> <li>- Tire pressure sensor 4: Specified pressure</li> <li>- Tire pressure sensor 4: Wheel position</li> <li>- Wheel set 1 specified pressure, front axle, partially loaded</li> </ul> </li> </ul>

2010/12  
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CCZA

2.0

200

Tire control system  
Tire pressure monitor 4.0

- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded

					<ul style="list-style-type: none"> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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SEAT					Alhambra [710] - Alhambra 2.0 TDI 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> </ul> </li> </ul>	

- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded



2011/05  
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CFFB

2.0

140

Tire control system  
Tire pressure monitor 4.0

- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded

					<ul style="list-style-type: none"> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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SEAT					Alhambra [710] - Alhambra 1.8 TSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> </ul> </li> </ul>	

- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded

2012/11 -	CDAA	1.8	160	Tire control system Tire pressure monitor 4.0	<p>loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently</li> </ul>
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					monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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SEAT					Altea Freetrack [5P5, 5P8] - Altea Freetrack 1.4 TSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> <li>- Evaporative emission control regeneration valve</li> <li>- Camshaft timing control (B1), inlet</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Basic adjustment throttle valve</li> <li>- Activate/deactivate cruise control</li> <li>- Compressor magnetic clutch basic setting</li> <li>- Compressor control flap basic setting</li> <li>- Activate/deactivate passenger compartment supplementary heater</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Bleeding fuel system</li> <li>- Fuel pressure reduction</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pressure</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Battery voltage</li> <li>- Fuel consumption</li> <li>- Ignition angle reduction: cyl. 1</li> <li>- Ignition angle reduction: cyl. 2</li> <li>- Ignition angle reduction: cyl. 3</li> <li>- Ignition angle reduction: cyl. 4</li> <li>- Engine revolution</li> <li>- Transverse acceleration</li> <li>- Inserted gear</li> </ul> </li> </ul>	

- Engine status
- Nominal parameters throttle valve
- engine oil temperature
- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda

2010/05  
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CAXC

1.4

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Engine control  
Motronic MED 17.5 UDS

- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:  
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:  
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.  
factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass  
meter
- Air leakage
- Long-term throttle valve adaptation to air mass  
meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque  
power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change

- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum
- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed
- Throttle valve position 2
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3



					<ul style="list-style-type: none"> <li>- Missfire detection counter Cylinder 4</li> <li>- Coolant temp. at engine start</li> <li>- Magnetic clutch monitoring</li> <li>- Temperature sensor downstream of radiator:</li> </ul> <p>Raw voltage</p> <ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- Turbo charger air circulation valve</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Fuel quantity control valve</li> <li>- Radiator fan controller 1</li> <li>- Electric fuel pump control unit</li> <li>- Compressor control flap</li> <li>- Aux coolant pump</li> <li>- Evaporative emission control regeneration valve</li> <li>- Wastegate solenoid valve</li> <li>- Actuator structure-borne noise</li> </ul>
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SEAT					Altea [5P1] - Altea 1.4 TSI	
Year	Engine	Liters	HP	System	Functions	
2007/11 -	CAXC	1.4	125	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> <li>• <b>Actuators</b></li> </ul>	

SEAT

Ibiza [6J1] SC - Ibiza SC 1.4 TSI

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> <li>- Evaporative emission control regeneration valve</li> <li>- Camshaft timing control (B1), inlet</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Basic adjustment throttle valve</li> <li>- Activate/deactivate cruise control</li> <li>- Compressor magnetic clutch basic setting</li> <li>- Compressor control flap basic setting</li> <li>- Activate/deactivate passenger compartment supplementary heater</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Bleeding fuel system</li> <li>- Fuel pressure reduction</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pressure</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Battery voltage</li> <li>- Fuel consumption</li> <li>- Ignition angle reduction: cyl. 1</li> <li>- Ignition angle reduction: cyl. 2</li> <li>- Ignition angle reduction: cyl. 3</li> <li>- Ignition angle reduction: cyl. 4</li> <li>- Engine revolution</li> <li>- Transverse acceleration</li> <li>- Inserted gear</li> <li>- Engine status</li> <li>- Nominal parameters throttle valve</li> <li>- engine oil temperature</li> <li>- Air mass, nominal value</li> <li>- Turbo pressure, nominal value</li> <li>- Turbo pressure, actual value</li> <li>- Intake air temperature</li> <li>- Engine oil level</li> <li>- Torque limitation</li> <li>- Oxygen sensor voltage (bank 1-sensor 1)</li> <li>- Oxygen sensor voltage (bank 1-sensor 2)</li> <li>- Set value, high fuel pressure</li> <li>- Fuel level (quantity)</li> <li>- Short-term mixture correction, bank 1</li> <li>- Long-term mixture correction, bank 1</li> <li>- Cooling agent temperature motor</li> <li>- Idle running speed target value</li> <li>- Gas pedal position sensor 1 Voltage</li> <li>- Gas pedal position sensor 2 Voltage</li> <li>- Longitudinal acceleration</li> <li>- Rate correction factor</li> <li>- Tempomat speed (required value)</li> <li>- Lambda probe heating resistance (B1, S1)</li> <li>- Lambda probe heating resistance (B1, S2)</li> <li>- Radiator fan 1 control</li> <li>- "Oil minimum" warning</li> </ul> </li> </ul>

2009/03  
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2012/10

CAVF

1.4

150

Engine control  
Motronic MED 17.5 UDS

- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:  
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:  
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.  
factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass  
meter
- Air leakage
- Long-term throttle valve adaptation to air mass  
meter

- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1

					<ul style="list-style-type: none"> <li>- Knock sensor voltage Cylinder 2</li> <li>- Knock sensor voltage Cylinder 3</li> <li>- Knock sensor voltage Cylinder 4</li> <li>- CAM: Deviation from reference position</li> <li>- Magnetic clutch actuation duty cycle</li> <li>- A/C compressor refrigerant pressure</li> <li>- Compressor control flap: actual/specified angle difference</li> <li>- ESP reduced required torque</li> <li>- ESP increased required torque</li> <li>- Oxygen sensor heating (B1, S1), actuation</li> <li>- Oxygen sensor heating (B1, S2), actuation</li> <li>- Fuel low pressure: Adaptation value</li> <li>- Drive specified torque</li> <li>- Crankshaft specified torque</li> <li>- Lambda control (b1): Part load adaptation value</li> <li>- Brake booster pressure raw value</li> <li>- Temperature sensor 1 compressor 2, raw value</li> <li>- Dew point, heat quantity (b1,s1), model value</li> <li>- Dew point, heat quantity (b1,s2), model value</li> <li>- Dew point end, counter start (b1,s1)</li> <li>- Dew point end, counter start (b1,s2)</li> <li>- Brake booster pressure actual value</li> <li>- Pressure upstream of charging module, raw value</li> <li>- Brake booster pump test: Result</li> <li>- Lateral acceleration raw value</li> <li>- Intake manifold intake air temperature, raw value</li> <li>- Intake air temperature upstream of throttle valve: raw value</li> <li>- Time since terminal 15 off</li> <li>- Combustion chamber air charge: Set value</li> <li>- Brake booster vacuum</li> <li>- Travel time with MIL activated</li> <li>- Brake booster vacuum pump</li> <li>- Lambda control deactivation</li> <li>- Exh. gas temperat. sensor (bank 1, sensor 1)</li> <li>- Camshaft speed</li> <li>- Throttle valve position 2</li> <li>- Missfire detection counter Cylinder 1</li> <li>- Missfire detection counter Cylinder 2</li> <li>- Missfire detection counter Cylinder 3</li> <li>- Missfire detection counter Cylinder 4</li> <li>- Coolant temp. at engine start</li> <li>- Magnetic clutch monitoring</li> <li>- Temperature sensor downstream of radiator:</li> </ul> <p>Raw voltage</p> <ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- Turbo charger air circulation valve</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Fuel quantity control valve</li> <li>- Radiator fan controller 1</li> <li>- Electric fuel pump control unit</li> <li>- Compressor control flap</li> <li>- Aux coolant pump</li> <li>- Evaporative emission control regeneration valve</li> <li>- Wastegate solenoid valve</li> <li>- Actuator structure-borne noise</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> </ul>

- Evaporative emission control regeneration valve
- Camshaft timing control (B1), inlet

- **Adjustments / settings**

- Adaptive parameters reset
- Basic adjustment throttle valve
- Activate/deactivate cruise control
- Compressor magnetic clutch basic setting
- Compressor control flap basic setting
- Activate/deactivate passenger compartment

supplementary heater

- **Special functions**

- Fuel tank emptying
- Bleeding fuel system
- Fuel pressure reduction

- **Error memory**

- **Current values**

- Fuel pressure
- Vehicle driving speed
- Accelerator pedal position
- Fuel temperature
- Battery voltage
- Fuel consumption
- Ignition angle reduction: cyl. 1
- Ignition angle reduction: cyl. 2
- Ignition angle reduction: cyl. 3
- Ignition angle reduction: cyl. 4
- Engine revolution
- Transverse acceleration
- Inserted gear
- Engine status
- Nominal parameters throttle valve
- engine oil temperature
- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)

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- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:  
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:  
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.  
factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass  
meter
- Air leakage
- Long-term throttle valve adaptation to air mass  
meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time

- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value



				<ul style="list-style-type: none"> <li>- Drive specified torque</li> <li>- Crankshaft specified torque</li> <li>- Lambda control (b1): Part load adaptation value</li> <li>- Brake booster pressure raw value</li> <li>- Temperature sensor 1 compressor 2, raw value</li> <li>- Dew point, heat quantity (b1,s1), model value</li> <li>- Dew point, heat quantity (b1,s2), model value</li> <li>- Dew point end, counter start (b1,s1)</li> <li>- Dew point end, counter start (b1,s2)</li> <li>- Brake booster pressure actual value</li> <li>- Pressure upstream of charging module, raw value</li> <li>- Brake booster pump test: Result</li> <li>- Lateral acceleration raw value</li> <li>- Intake manifold intake air temperature, raw value</li> <li>- Intake air temperature upstream of throttle valve: raw value</li> <li>- Time since terminal 15 off</li> <li>- Combustion chamber air charge: Set value</li> <li>- Brake booster vacuum</li> <li>- Travel time with MIL activated</li> <li>- Brake booster vacuum pump</li> <li>- Lambda control deactivation</li> <li>- Exh. gas temperat. sensor (bank 1, sensor 1)</li> <li>- Camshaft speed</li> <li>- Throttle valve position 2</li> <li>- Missfire detection counter Cylinder 1</li> <li>- Missfire detection counter Cylinder 2</li> <li>- Missfire detection counter Cylinder 3</li> <li>- Missfire detection counter Cylinder 4</li> <li>- Coolant temp. at engine start</li> <li>- Magnetic clutch monitoring</li> <li>- Temperature sensor downstream of radiator: Raw voltage</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- Turbo charger air circulation valve</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Fuel quantity control valve</li> <li>- Radiator fan controller 1</li> <li>- Electric fuel pump control unit</li> <li>- Compressor control flap</li> <li>- Aux coolant pump</li> <li>- Evaporative emission control regeneration valve</li> <li>- Wastegate solenoid valve</li> <li>- Actuator structure-borne noise</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> <li>- Evaporative emission control regeneration valve</li> <li>- Camshaft timing control (B1), inlet</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Basic adjustment throttle valve</li> <li>- Activate/deactivate cruise control</li> <li>- Compressor magnetic clutch basic setting</li> <li>- Compressor control flap basic setting</li> <li>- Activate/deactivate passenger compartment supplementary heater</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> </ul> </li> </ul>

- Bleeding fuel system
- Fuel pressure reduction
- **Error memory**
- **Current values**
- Fuel pressure
- Vehicle driving speed
- Accelerator pedal position
- Fuel temperature
- Battery voltage
- Fuel consumption
- Ignition angle reduction: cyl. 1
- Ignition angle reduction: cyl. 2
- Ignition angle reduction: cyl. 3
- Ignition angle reduction: cyl. 4
- Engine revolution
- Transverse acceleration
- Inserted gear
- Engine status
- Nominal parameters throttle valve
- engine oil temperature
- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status

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- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:  
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:  
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.  
factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass  
meter
- Air leakage
- Long-term throttle valve adaptation to air mass  
meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume

- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value

				<ul style="list-style-type: none"> <li>- Brake booster pump test: Result</li> <li>- Lateral acceleration raw value</li> <li>- Intake manifold intake air temperature, raw value</li> <li>- Intake air temperature upstream of throttle valve: raw value</li> <li>- Time since terminal 15 off</li> <li>- Combustion chamber air charge: Set value</li> <li>- Brake booster vacuum</li> <li>- Travel time with MIL activated</li> <li>- Brake booster vacuum pump</li> <li>- Lambda control deactivation</li> <li>- Exh. gas temperat. sensor (bank 1, sensor 1)</li> <li>- Camshaft speed</li> <li>- Throttle valve position 2</li> <li>- Missfire detection counter Cylinder 1</li> <li>- Missfire detection counter Cylinder 2</li> <li>- Missfire detection counter Cylinder 3</li> <li>- Missfire detection counter Cylinder 4</li> <li>- Coolant temp. at engine start</li> <li>- Magnetic clutch monitoring</li> <li>- Temperature sensor downstream of radiator:</li> </ul> <p>Raw voltage</p> <ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- Turbo charger air circulation valve</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Fuel quantity control valve</li> <li>- Radiator fan controller 1</li> <li>- Electric fuel pump control unit</li> <li>- Compressor control flap</li> <li>- Aux coolant pump</li> <li>- Evaporative emission control regeneration valve</li> <li>- Wastegate solenoid valve</li> <li>- Actuator structure-borne noise</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> <li>- Evaporative emission control regeneration valve</li> <li>- Camshaft timing control (B1), inlet</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Basic adjustment throttle valve</li> <li>- Activate/deactivate cruise control</li> <li>- Compressor magnetic clutch basic setting</li> <li>- Compressor control flap basic setting</li> <li>- Activate/deactivate passenger compartment supplementary heater</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Bleeding fuel system</li> <li>- Fuel pressure reduction</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pressure</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Battery voltage</li> <li>- Fuel consumption</li> <li>- Ignition angle reduction: cyl. 1</li> <li>- Ignition angle reduction: cyl. 2</li> <li>- Ignition angle reduction: cyl. 3</li> </ul> </li> </ul>

- Ignition angle reduction: cyl. 4
- Engine revolution
- Transverse acceleration
- Inserted gear
- Engine status
- Nominal parameters throttle valve
- engine oil temperature
- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request

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Engine control  
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- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:  
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:  
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.  
factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass  
meter
- Air leakage
- Long-term throttle valve adaptation to air mass  
meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque  
power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle

- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum
- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed



					<ul style="list-style-type: none"> <li>- Throttle valve position 2</li> <li>- Missfire detection counter Cylinder 1</li> <li>- Missfire detection counter Cylinder 2</li> <li>- Missfire detection counter Cylinder 3</li> <li>- Missfire detection counter Cylinder 4</li> <li>- Coolant temp. at engine start</li> <li>- Magnetic clutch monitoring</li> <li>- Temperature sensor downstream of radiator:</li> </ul> <p>Raw voltage</p> <ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- Turbo charger air circulation valve</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Fuel quantity control valve</li> <li>- Radiator fan controller 1</li> <li>- Electric fuel pump control unit</li> <li>- Compressor control flap</li> <li>- Aux coolant pump</li> <li>- Evaporative emission control regeneration valve</li> <li>- Wastegate solenoid valve</li> <li>- Actuator structure-borne noise</li> </ul> </li> </ul>
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SEAT					Ibiza [6J1] SC - Ibiza SC 1.4 TSI Cupra	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> <li>- Evaporative emission control regeneration valve</li> <li>- Camshaft timing control (B1), inlet</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Basic adjustment throttle valve</li> <li>- Activate/deactivate cruise control</li> <li>- Compressor magnetic clutch basic setting</li> <li>- Compressor control flap basic setting</li> <li>- Activate/deactivate passenger compartment supplementary heater</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Bleeding fuel system</li> <li>- Fuel pressure reduction</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pressure</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Battery voltage</li> <li>- Fuel consumption</li> <li>- Ignition angle reduction: cyl. 1</li> <li>- Ignition angle reduction: cyl. 2</li> <li>- Ignition angle reduction: cyl. 3</li> <li>- Ignition angle reduction: cyl. 4</li> <li>- Engine revolution</li> <li>- Transverse acceleration</li> <li>- Inserted gear</li> <li>- Engine status</li> <li>- Nominal parameters throttle valve</li> <li>- engine oil temperature</li> <li>- Air mass, nominal value</li> </ul> </li> </ul>	

- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:  
number

2009/03 - 2012/06	CAVE	1.4	180	Engine control Motronic MED 17.5 UDS	<ul style="list-style-type: none"> <li>- Oxygen sensor (b1,s2): Ri limit value</li> <li>- Oxygen sensor (b1,s1): characteristics offset</li> <li>- Oxygen sensor (b1,S1) fast offset adaptation: counter</li> <li>- Oxygen sensor (b1,s1): Ceramics temperature</li> <li>- Oxygen sensor ageing check (S2): result</li> <li>- Operating instructions</li> <li>- Catalytic converter O2 capacity: measured</li> <li>- Catalytic converter O2 capacity: ageing corr. factor</li> <li>- Throttle valve position: absolute</li> <li>- Throttle valve position: standardised</li> <li>- Ambient air pressure</li> <li>- Conversion check: Measured value</li> <li>- Conversion check: Result</li> <li>- Torque loss adaption</li> <li>- Throttle valve adaption: Result</li> <li>- Short-term throttle valve adaption to air mass meter</li> <li>- Air leakage</li> <li>- Long-term throttle valve adaptation to air mass meter</li> <li>- Charge-air pressure control: set value</li> <li>- Intake manifold pressure, raw value</li> <li>- Ignition timing adjustment, cyl. 1</li> <li>- Absolute suction pressure</li> <li>- Equivalence ratio: set value</li> <li>- Mileage since fault memory cleared</li> <li>- Distance covered with active MIL</li> <li>- Status, initial filling, fuel tank</li> <li>- Time since engine start</li> <li>- Absolute load value</li> <li>- Standardised load rating</li> <li>- Starter control: Interlock or P/N signal</li> <li>- Average injection time</li> <li>- Engine start: start synchronisation</li> <li>- Camshaft position: Start of phase window</li> <li>- Accelerator switch positions</li> <li>- Auxiliary system torque request</li> <li>- ACC specified acceleration</li> <li>- Evap.emiss.ctrl. control valve: specified position</li> <li>- Test steps still to be implemented</li> <li>- Long-term mixture correction/idle (B1)</li> <li>- Crankshaft angle / quantity control valve closed</li> <li>- Crankshaft angle / quantity control valve opened</li> <li>- Fuel HP regulation: Adaptation value</li> <li>- High pressure fuel pump: delivery volume</li> <li>- Total vehicle mileage</li> <li>- Total control unit mileage</li> <li>- Torque loss adaptation: Idle</li> <li>- Adaptation A/C compressor torque power loss</li> <li>- Adaptation of transmission torque power loss</li> <li>- Adaptation transmission and compressor torque power loss</li> <li>- Ignition angle retard: mean value</li> <li>- Reference moment, misfire detection</li> <li>- EVAP system: adaptation factor</li> <li>- Irregular CU deactivations: counter reading</li> <li>- Compressor control flap actuation</li> <li>- EVAP diagnosis: actuation duty cycle</li> <li>- EVAP diagnosis: differential pressure ratio</li> <li>- EVAP diagnosis: Result correlation factor</li> <li>- Knock sensor test: short trip result</li> <li>- Idle speed control: Requested torque change</li> <li>- Long-term adjustment LR bank 1</li> <li>- Load value: set value</li> <li>- Fuel pump: set value</li> <li>- Kick-down shift point adaptation</li> </ul>
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- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum
- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed
- Throttle valve position 2
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Coolant temp. at engine start
- Magnetic clutch monitoring
- Temperature sensor downstream of radiator:

					<p>Raw voltage</p> <ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- Turbo charger air circulation valve</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Fuel quantity control valve</li> <li>- Radiator fan controller 1</li> <li>- Electric fuel pump control unit</li> <li>- Compressor control flap</li> <li>- Aux coolant pump</li> <li>- Evaporative emission control regeneration valve</li> <li>- Wastegate solenoid valve</li> <li>- Actuator structure-borne noise</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> <li>- Evaporative emission control regeneration valve</li> <li>- Camshaft timing control (B1), inlet</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Basic adjustment throttle valve</li> <li>- Activate/deactivate cruise control</li> <li>- Compressor magnetic clutch basic setting</li> <li>- Compressor control flap basic setting</li> <li>- Activate/deactivate passenger compartment supplementary heater</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Bleeding fuel system</li> <li>- Fuel pressure reduction</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pressure</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Battery voltage</li> <li>- Fuel consumption</li> <li>- Ignition angle reduction: cyl. 1</li> <li>- Ignition angle reduction: cyl. 2</li> <li>- Ignition angle reduction: cyl. 3</li> <li>- Ignition angle reduction: cyl. 4</li> <li>- Engine revolution</li> <li>- Transverse acceleration</li> <li>- Inserted gear</li> <li>- Engine status</li> <li>- Nominal parameters throttle valve</li> <li>- engine oil temperature</li> <li>- Air mass, nominal value</li> <li>- Turbo pressure, nominal value</li> <li>- Turbo pressure, actual value</li> <li>- Intake air temperature</li> <li>- Engine oil level</li> <li>- Torque limitation</li> <li>- Oxygen sensor voltage (bank 1-sensor 1)</li> <li>- Oxygen sensor voltage (bank 1-sensor 2)</li> <li>- Set value, high fuel pressure</li> <li>- Fuel level (quantity)</li> <li>- Short-term mixture correction, bank 1</li> <li>- Long-term mixture correction, bank 1</li> <li>- Cooling agent temperature motor</li> <li>- Idle running speed target value</li> </ul> </li> </ul>

- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:  
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:  
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.  
factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure

2012/07 -	CT...	1.4	180	Engine control Motronic MED 17.5 UDS	<ul style="list-style-type: none"> <li>- Conversion check: Measured value</li> <li>- Conversion check: Result</li> <li>- Torque loss adaption</li> <li>- Throttle valve adaption: Result</li> <li>- Short-term throttle valve adaption to air mass meter</li> <li>- Air leakage</li> <li>- Long-term throttle valve adaptation to air mass meter</li> <li>- Charge-air pressure control: set value</li> <li>- Intake manifold pressure, raw value</li> <li>- Ignition timing adjustment, cyl. 1</li> <li>- Absolute suction pressure</li> <li>- Equivalence ratio: set value</li> <li>- Mileage since fault memory cleared</li> <li>- Distance covered with active MIL</li> <li>- Status, initial filling, fuel tank</li> <li>- Time since engine start</li> <li>- Absolute load value</li> <li>- Standardised load rating</li> <li>- Starter control: Interlock or P/N signal</li> <li>- Average injection time</li> <li>- Engine start: start synchronisation</li> <li>- Camshaft position: Start of phase window</li> <li>- Accelerator switch positions</li> <li>- Auxiliary system torque request</li> <li>- ACC specified acceleration</li> <li>- Evap.emiss.ctrl. control valve: specified position</li> <li>- Test steps still to be implemented</li> <li>- Long-term mixture correction/idle (B1)</li> <li>- Crankshaft angle / quantity control valve closed</li> <li>- Crankshaft angle / quantity control valve opened</li> <li>- Fuel HP regulation: Adaptation value</li> <li>- High pressure fuel pump: delivery volume</li> <li>- Total vehicle mileage</li> <li>- Total control unit mileage</li> <li>- Torque loss adaptation: Idle</li> <li>- Adaptation A/C compressor torque power loss</li> <li>- Adaptation of transmission torque power loss</li> <li>- Adaptation transmission and compressor torque power loss</li> <li>- Ignition angle retard: mean value</li> <li>- Reference moment, misfire detection</li> <li>- EVAP system: adaptation factor</li> <li>- Irregular CU deactivations: counter reading</li> <li>- Compressor control flap actuation</li> <li>- EVAP diagnosis: actuation duty cycle</li> <li>- EVAP diagnosis: differential pressure ratio</li> <li>- EVAP diagnosis: Result correlation factor</li> <li>- Knock sensor test: short trip result</li> <li>- Idle speed control: Requested torque change</li> <li>- Long-term adjustment LR bank 1</li> <li>- Load value: set value</li> <li>- Fuel pump: set value</li> <li>- Kick-down shift point adaptation</li> <li>- Inlet camshaft timing actuation (b1)</li> <li>- Level detection test result</li> <li>- Camshaft actuator actual/specified angle difference</li> <li>- Calculated torque reduction on transmission intervention</li> <li>- Internal torque set value formation</li> <li>- Compressor test</li> <li>- Accelerator pedal travel</li> <li>- Accelerator pedal position 2</li> <li>- Test EVAP valve: Result</li> <li>- Inlet camshaft control test (b1): result</li> <li>- Number of invalid keys</li> </ul>
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- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum
- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed
- Throttle valve position 2
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Coolant temp. at engine start
- Magnetic clutch monitoring
- Temperature sensor downstream of radiator:
- Raw voltage
- **Actuators**
- Air conditioner electromagnetic clutch - compressor
- Turbo charger air circulation valve
- Inlet camshaft timing control (bank 1)
- Fuel quantity control valve
- Radiator fan controller 1
- Electric fuel pump control unit
- Compressor control flap
- Aux coolant pump
- Evaporative emission control regeneration valve
- Wastegate solenoid valve



- Actuator structure-borne noise

SEAT				Ibiza [6J5] - Ibiza 1.4 TSI	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"><li>• <b>Identification</b></li><li>• <b>Clear errors</b></li><li>• <b>Functional tests</b><ul style="list-style-type: none"><li>- Generate readiness code</li><li>- catalytic system effectiveness, bank 1</li><li>- Lambda sensor ageing (bank 1, sensor 1)</li><li>- Lambda probe ageing (B1, S2)</li><li>- Evaporative emission control regeneration valve</li><li>- Camshaft timing control (B1), inlet</li></ul></li><li>• <b>Adjustments / settings</b><ul style="list-style-type: none"><li>- Adaptive parameters reset</li><li>- Basic adjustment throttle valve</li><li>- Activate/deactivate cruise control</li><li>- Compressor magnetic clutch basic setting</li><li>- Compressor control flap basic setting</li><li>- Activate/deactivate passenger compartment supplementary heater</li></ul></li><li>• <b>Special functions</b><ul style="list-style-type: none"><li>- Fuel tank emptying</li><li>- Bleeding fuel system</li><li>- Fuel pressure reduction</li></ul></li><li>• <b>Error memory</b></li><li>• <b>Current values</b><ul style="list-style-type: none"><li>- Fuel pressure</li><li>- Vehicle driving speed</li><li>- Accelerator pedal position</li><li>- Fuel temperature</li><li>- Battery voltage</li><li>- Fuel consumption</li><li>- Ignition angle reduction: cyl. 1</li><li>- Ignition angle reduction: cyl. 2</li><li>- Ignition angle reduction: cyl. 3</li><li>- Ignition angle reduction: cyl. 4</li><li>- Engine revolution</li><li>- Transverse acceleration</li><li>- Inserted gear</li><li>- Engine status</li><li>- Nominal parameters throttle valve</li><li>- engine oil temperature</li><li>- Air mass, nominal value</li><li>- Turbo pressure, nominal value</li><li>- Turbo pressure, actual value</li><li>- Intake air temperature</li><li>- Engine oil level</li><li>- Torque limitation</li><li>- Oxygen sensor voltage (bank 1-sensor 1)</li><li>- Oxygen sensor voltage (bank 1-sensor 2)</li><li>- Set value, high fuel pressure</li><li>- Fuel level (quantity)</li><li>- Short-term mixture correction, bank 1</li><li>- Long-term mixture correction, bank 1</li><li>- Cooling agent temperature motor</li><li>- Idle running speed target value</li><li>- Gas pedal position sensor 1 Voltage</li><li>- Gas pedal position sensor 2 Voltage</li><li>- Longitudinal acceleration</li><li>- Rate correction factor</li><li>- Tempomat speed (required value)</li><li>- Lambda probe heating resistance (B1, S1)</li><li>- Lambda probe heating resistance (B1, S2)</li></ul></li></ul>

- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:  
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:  
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.
- factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass  
meter
- Air leakage

2009/03 - 2012/10	CAVF	1.4	150	Engine control Motronic MED 17.5 UDS	<ul style="list-style-type: none"> <li>- Long-term throttle valve adaptation to air mass meter</li> <li>- Charge-air pressure control: set value</li> <li>- Intake manifold pressure, raw value</li> <li>- Ignition timing adjustment, cyl. 1</li> <li>- Absolute suction pressure</li> <li>- Equivalence ratio: set value</li> <li>- Mileage since fault memory cleared</li> <li>- Distance covered with active MIL</li> <li>- Status, initial filling, fuel tank</li> <li>- Time since engine start</li> <li>- Absolute load value</li> <li>- Standardised load rating</li> <li>- Starter control: Interlock or P/N signal</li> <li>- Average injection time</li> <li>- Engine start: start synchronisation</li> <li>- Camshaft position: Start of phase window</li> <li>- Accelerator switch positions</li> <li>- Auxiliary system torque request</li> <li>- ACC specified acceleration</li> <li>- Evap.emiss.ctrl. control valve: specified position</li> <li>- Test steps still to be implemented</li> <li>- Long-term mixture correction/idle (B1)</li> <li>- Crankshaft angle / quantity control valve closed</li> <li>- Crankshaft angle / quantity control valve opened</li> <li>- Fuel HP regulation: Adaptation value</li> <li>- High pressure fuel pump: delivery volume</li> <li>- Total vehicle mileage</li> <li>- Total control unit mileage</li> <li>- Torque loss adaptation: Idle</li> <li>- Adaptation A/C compressor torque power loss</li> <li>- Adaptation of transmission torque power loss</li> <li>- Adaptation transmission and compressor torque power loss</li> <li>- Ignition angle retard: mean value</li> <li>- Reference moment, misfire detection</li> <li>- EVAP system: adaptation factor</li> <li>- Irregular CU deactivations: counter reading</li> <li>- Compressor control flap actuation</li> <li>- EVAP diagnosis: actuation duty cycle</li> <li>- EVAP diagnosis: differential pressure ratio</li> <li>- EVAP diagnosis: Result correlation factor</li> <li>- Knock sensor test: short trip result</li> <li>- Idle speed control: Requested torque change</li> <li>- Long-term adjustment LR bank 1</li> <li>- Load value: set value</li> <li>- Fuel pump: set value</li> <li>- Kick-down shift point adaptation</li> <li>- Inlet camshaft timing actuation (b1)</li> <li>- Level detection test result</li> <li>- Camshaft actuator actual/specified angle difference</li> <li>- Calculated torque reduction on transmission intervention</li> <li>- Internal torque set value formation</li> <li>- Compressor test</li> <li>- Accelerator pedal travel</li> <li>- Accelerator pedal position 2</li> <li>- Test EVAP valve: Result</li> <li>- Inlet camshaft control test (b1): result</li> <li>- Number of invalid keys</li> <li>- Acceleration interface, braking torque set value</li> <li>- Exhaust gas mass flow (b1,s1), filtered value</li> <li>- Requested specified idling speed</li> <li>- Fuel high pressure: regulator output value</li> <li>- Exhaust gas temperature sensor 2, calculated</li> <li>- OBD: Request for this vehicle</li> <li>- Accelerator pedal: limitation</li> </ul>
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					<ul style="list-style-type: none"> <li>- Throttle valve air mass flow</li> <li>- Knock sensor voltage Cylinder 1</li> <li>- Knock sensor voltage Cylinder 2</li> <li>- Knock sensor voltage Cylinder 3</li> <li>- Knock sensor voltage Cylinder 4</li> <li>- CAM: Deviation from reference position</li> <li>- Magnetic clutch actuation duty cycle</li> <li>- A/C compressor refrigerant pressure</li> <li>- Compressor control flap: actual/specified angle difference</li> <li>- ESP reduced required torque</li> <li>- ESP increased required torque</li> <li>- Oxygen sensor heating (B1, S1), actuation</li> <li>- Oxygen sensor heating (B1, S2), actuation</li> <li>- Fuel low pressure: Adaptation value</li> <li>- Drive specified torque</li> <li>- Crankshaft specified torque</li> <li>- Lambda control (b1): Part load adaptation value</li> <li>- Brake booster pressure raw value</li> <li>- Temperature sensor 1 compressor 2, raw value</li> <li>- Dew point, heat quantity (b1,s1), model value</li> <li>- Dew point, heat quantity (b1,s2), model value</li> <li>- Dew point end, counter start (b1,s1)</li> <li>- Dew point end, counter start (b1,s2)</li> <li>- Brake booster pressure actual value</li> <li>- Pressure upstream of charging module, raw value</li> <li>- Brake booster pump test: Result</li> <li>- Lateral acceleration raw value</li> <li>- Intake manifold intake air temperature, raw value</li> <li>- Intake air temperature upstream of throttle valve: raw value</li> <li>- Time since terminal 15 off</li> <li>- Combustion chamber air charge: Set value</li> <li>- Brake booster vacuum</li> <li>- Travel time with MIL activated</li> <li>- Brake booster vacuum pump</li> <li>- Lambda control deactivation</li> <li>- Exh. gas temperat. sensor (bank 1, sensor 1)</li> <li>- Camshaft speed</li> <li>- Throttle valve position 2</li> <li>- Missfire detection counter Cylinder 1</li> <li>- Missfire detection counter Cylinder 2</li> <li>- Missfire detection counter Cylinder 3</li> <li>- Missfire detection counter Cylinder 4</li> <li>- Coolant temp. at engine start</li> <li>- Magnetic clutch monitoring</li> <li>- Temperature sensor downstream of radiator:</li> </ul> <p>Raw voltage</p> <ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- Turbo charger air circulation valve</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Fuel quantity control valve</li> <li>- Radiator fan controller 1</li> <li>- Electric fuel pump control unit</li> <li>- Compressor control flap</li> <li>- Aux coolant pump</li> <li>- Evaporative emission control regeneration valve</li> <li>- Wastegate solenoid valve</li> <li>- Actuator structure-borne noise</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> </ul> </li> </ul>

- Lambda sensor ageing (bank 1, sensor 1)
- Lambda probe ageing (B1, S2)
- Evaporative emission control regeneration valve
- Camshaft timing control (B1), inlet
- **Adjustments / settings**
  - Adaptive parameters reset
  - Basic adjustment throttle valve
  - Activate/deactivate cruise control
  - Compressor magnetic clutch basic setting
  - Compressor control flap basic setting
  - Activate/deactivate passenger compartment supplementary heater
- **Special functions**
  - Fuel tank emptying
  - Bleeding fuel system
  - Fuel pressure reduction
- **Error memory**
- **Current values**
  - Fuel pressure
  - Vehicle driving speed
  - Accelerator pedal position
  - Fuel temperature
  - Battery voltage
  - Fuel consumption
  - Ignition angle reduction: cyl. 1
  - Ignition angle reduction: cyl. 2
  - Ignition angle reduction: cyl. 3
  - Ignition angle reduction: cyl. 4
  - Engine revolution
  - Transverse acceleration
  - Inserted gear
  - Engine status
  - Nominal parameters throttle valve
  - engine oil temperature
  - Air mass, nominal value
  - Turbo pressure, nominal value
  - Turbo pressure, actual value
  - Intake air temperature
  - Engine oil level
  - Torque limitation
  - Oxygen sensor voltage (bank 1-sensor 1)
  - Oxygen sensor voltage (bank 1-sensor 2)
  - Set value, high fuel pressure
  - Fuel level (quantity)
  - Short-term mixture correction, bank 1
  - Long-term mixture correction, bank 1
  - Cooling agent temperature motor
  - Idle running speed target value
  - Gas pedal position sensor 1 Voltage
  - Gas pedal position sensor 2 Voltage
  - Longitudinal acceleration
  - Rate correction factor
  - Tempomat speed (required value)
  - Lambda probe heating resistance (B1, S1)
  - Lambda probe heating resistance (B1, S2)
  - Radiator fan 1 control
  - "Oil minimum" warning
  - Engine torque
  - Ambient temperature
  - Engine operating status
  - Brake pressure
  - Exhaust gas temperature (bank 1, sensor 1)
  - Missing detection counter
  - Basic setting status
  - Brake status
  - Generator charge signal
  - Power supply Clamp 30
  - Kickdown switch status

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Engine control  
Motronic MED 17.5 UDS

- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:  
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:  
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.  
factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass  
meter
- Air leakage
- Long-term throttle valve adaptation to air mass  
meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating

- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation

					<ul style="list-style-type: none"> <li>- Oxygen sensor heating (B1, S2), actuation</li> <li>- Fuel low pressure: Adaptation value</li> <li>- Drive specified torque</li> <li>- Crankshaft specified torque</li> <li>- Lambda control (b1): Part load adaptation value</li> <li>- Brake booster pressure raw value</li> <li>- Temperature sensor 1 compressor 2, raw value</li> <li>- Dew point, heat quantity (b1,s1), model value</li> <li>- Dew point, heat quantity (b1,s2), model value</li> <li>- Dew point end, counter start (b1,s1)</li> <li>- Dew point end, counter start (b1,s2)</li> <li>- Brake booster pressure actual value</li> <li>- Pressure upstream of charging module, raw value</li> <li>- Brake booster pump test: Result</li> <li>- Lateral acceleration raw value</li> <li>- Intake manifold intake air temperature, raw value</li> <li>- Intake air temperature upstream of throttle valve: raw value</li> <li>- Time since terminal 15 off</li> <li>- Combustion chamber air charge: Set value</li> <li>- Brake booster vacuum</li> <li>- Travel time with MIL activated</li> <li>- Brake booster vacuum pump</li> <li>- Lambda control deactivation</li> <li>- Exh. gas temperat. sensor (bank 1, sensor 1)</li> <li>- Camshaft speed</li> <li>- Throttle valve position 2</li> <li>- Missfire detection counter Cylinder 1</li> <li>- Missfire detection counter Cylinder 2</li> <li>- Missfire detection counter Cylinder 3</li> <li>- Missfire detection counter Cylinder 4</li> <li>- Coolant temp. at engine start</li> <li>- Magnetic clutch monitoring</li> <li>- Temperature sensor downstream of radiator:</li> <li>Raw voltage</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- Turbo charger air circulation valve</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Fuel quantity control valve</li> <li>- Radiator fan controller 1</li> <li>- Electric fuel pump control unit</li> <li>- Compressor control flap</li> <li>- Aux coolant pump</li> <li>- Evaporative emission control regeneration valve</li> <li>- Wastegate solenoid valve</li> <li>- Actuator structure-borne noise</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> <li>- Evaporative emission control regeneration valve</li> <li>- Camshaft timing control (B1), inlet</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Basic adjustment throttle valve</li> <li>- Activate/deactivate cruise control</li> <li>- Compressor magnetic clutch basic setting</li> <li>- Compressor control flap basic setting</li> <li>- Activate/deactivate passenger compartment supplementary heater</li> </ul> </li> <li>• <b>Special functions</b></li> </ul>



- Fuel tank emptying
- Bleeding fuel system
- Fuel pressure reduction
- **Error memory**
- **Current values**
- Fuel pressure
- Vehicle driving speed
- Accelerator pedal position
- Fuel temperature
- Battery voltage
- Fuel consumption
- Ignition angle reduction: cyl. 1
- Ignition angle reduction: cyl. 2
- Ignition angle reduction: cyl. 3
- Ignition angle reduction: cyl. 4
- Engine revolution
- Transverse acceleration
- Inserted gear
- Engine status
- Nominal parameters throttle valve
- engine oil temperature
- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4

2012/04 -	CTHF	1.4	150	Engine control Motronic MED 17.5 UDS	<ul style="list-style-type: none"> <li>- Misfiring detection status</li> <li>- Relative load value</li> <li>- Lambda sensor test result, bank 1</li> <li>- Desired transmission torque</li> <li>- Throttle valve angle 1 adaption</li> <li>- Throttle valve angle 2 adaption</li> <li>- Throttle angle 1 adaption: Emergency air gap</li> <li>- Throttle angle 2 adaption: Emergency air gap</li> <li>- Dew point end adaptation status</li> <li>- CAN timeout counter parking brake</li> <li>- CAN timeout counter Gateway</li> <li>- CAN timeout counter steering angle</li> <li>- CAN timeout counter transmission</li> <li>- A/C compressor torque request</li> <li>- Crankshaft signal evaluation status</li> <li>- Testing oxygen sensor ageing (b1/3,s1): result</li> <li>- Oxygen sensor operational readiness (S2)</li> <li>- Testing, oxygen sensor bank 1: Delta-lambda</li> <li>- Lambda control test</li> <li>- Lambda sensor (B1, S1), set value</li> <li>- Oxygen sensor (b1,s1) dynamic checks: number</li> <li>- Oxygen sensor (b1,s2): Ri limit value</li> <li>- Oxygen sensor (b1,s1): characteristics offset</li> <li>- Oxygen sensor (b1,S1) fast offset adaptation: counter</li> <li>- Oxygen sensor (b1,s1): Ceramics temperature</li> <li>- Oxygen sensor ageing check (S2): result</li> <li>- Operating instructions</li> <li>- Catalytic converter O2 capacity: measured</li> <li>- Catalytic converter O2 capacity: ageing corr. factor</li> <li>- Throttle valve position: absolute</li> <li>- Throttle valve position: standardised</li> <li>- Ambient air pressure</li> <li>- Conversion check: Measured value</li> <li>- Conversion check: Result</li> <li>- Torque loss adaption</li> <li>- Throttle valve adaption: Result</li> <li>- Short-term throttle valve adaption to air mass meter</li> <li>- Air leakage</li> <li>- Long-term throttle valve adaptation to air mass meter</li> <li>- Charge-air pressure control: set value</li> <li>- Intake manifold pressure, raw value</li> <li>- Ignition timing adjustment, cyl. 1</li> <li>- Absolute suction pressure</li> <li>- Equivalence ratio: set value</li> <li>- Mileage since fault memory cleared</li> <li>- Distance covered with active MIL</li> <li>- Status, initial filling, fuel tank</li> <li>- Time since engine start</li> <li>- Absolute load value</li> <li>- Standardised load rating</li> <li>- Starter control: Interlock or P/N signal</li> <li>- Average injection time</li> <li>- Engine start: start synchronisation</li> <li>- Camshaft position: Start of phase window</li> <li>- Accelerator switch positions</li> <li>- Auxiliary system torque request</li> <li>- ACC specified acceleration</li> <li>- Evap.emiss.ctrl. control valve: specified position</li> <li>- Test steps still to be implemented</li> <li>- Long-term mixture correction/idle (B1)</li> <li>- Crankshaft angle / quantity control valve closed</li> <li>- Crankshaft angle / quantity control valve opened</li> <li>- Fuel HP regulation: Adaptation value</li> </ul>
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- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw

					<p>value</p> <ul style="list-style-type: none"> <li>- Brake booster pump test: Result</li> <li>- Lateral acceleration raw value</li> <li>- Intake manifold intake air temperature, raw value</li> <li>- Intake air temperature upstream of throttle valve:</li> </ul> <p>raw value</p> <ul style="list-style-type: none"> <li>- Time since terminal 15 off</li> <li>- Combustion chamber air charge: Set value</li> <li>- Brake booster vacuum</li> <li>- Travel time with MIL activated</li> <li>- Brake booster vacuum pump</li> <li>- Lambda control deactivation</li> <li>- Exh. gas temperat. sensor (bank 1, sensor 1)</li> <li>- Camshaft speed</li> <li>- Throttle valve position 2</li> <li>- Missfire detection counter Cylinder 1</li> <li>- Missfire detection counter Cylinder 2</li> <li>- Missfire detection counter Cylinder 3</li> <li>- Missfire detection counter Cylinder 4</li> <li>- Coolant temp. at engine start</li> <li>- Magnetic clutch monitoring</li> <li>- Temperature sensor downstream of radiator:</li> </ul> <p>Raw voltage</p> <ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- Turbo charger air circulation valve</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Fuel quantity control valve</li> <li>- Radiator fan controller 1</li> <li>- Electric fuel pump control unit</li> <li>- Compressor control flap</li> <li>- Aux coolant pump</li> <li>- Evaporative emission control regeneration valve</li> <li>- Wastegate solenoid valve</li> <li>- Actuator structure-borne noise</li> </ul> </li> </ul>
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SEAT					Ibiza [6J8] ST - Ibiza ST 1.4 TSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> <li>- Evaporative emission control regeneration valve</li> <li>- Camshaft timing control (B1), inlet</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Basic adjustment throttle valve</li> <li>- Activate/deactivate cruise control</li> <li>- Compressor magnetic clutch basic setting</li> <li>- Compressor control flap basic setting</li> <li>- Activate/deactivate passenger compartment supplementary heater</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Bleeding fuel system</li> <li>- Fuel pressure reduction</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pressure</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> </ul> </li> </ul>	

- Fuel temperature
- Battery voltage
- Fuel consumption
- Ignition angle reduction: cyl. 1
- Ignition angle reduction: cyl. 2
- Ignition angle reduction: cyl. 3
- Ignition angle reduction: cyl. 4
- Engine revolution
- Transverse acceleration
- Inserted gear
- Engine status
- Nominal parameters throttle valve
- engine oil temperature
- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap

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Engine control  
Motronic MED 17.5 UDS

- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:  
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:  
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.  
factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass  
meter
- Air leakage
- Long-term throttle valve adaptation to air mass  
meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque  
power loss

- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value

					<ul style="list-style-type: none"> <li>- Brake booster vacuum</li> <li>- Travel time with MIL activated</li> <li>- Brake booster vacuum pump</li> <li>- Lambda control deactivation</li> <li>- Exh. gas temperat. sensor (bank 1, sensor 1)</li> <li>- Camshaft speed</li> <li>- Throttle valve position 2</li> <li>- Missfire detection counter Cylinder 1</li> <li>- Missfire detection counter Cylinder 2</li> <li>- Missfire detection counter Cylinder 3</li> <li>- Missfire detection counter Cylinder 4</li> <li>- Coolant temp. at engine start</li> <li>- Magnetic clutch monitoring</li> <li>- Temperature sensor downstream of radiator:</li> </ul> <p>Raw voltage</p> <ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- Turbo charger air circulation valve</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Fuel quantity control valve</li> <li>- Radiator fan controller 1</li> <li>- Electric fuel pump control unit</li> <li>- Compressor control flap</li> <li>- Aux coolant pump</li> <li>- Evaporative emission control regeneration valve</li> <li>- Wastegate solenoid valve</li> <li>- Actuator structure-borne noise</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> <li>- Evaporative emission control regeneration valve</li> <li>- Camshaft timing control (B1), inlet</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Basic adjustment throttle valve</li> <li>- Activate/deactivate cruise control</li> <li>- Compressor magnetic clutch basic setting</li> <li>- Compressor control flap basic setting</li> <li>- Activate/deactivate passenger compartment supplementary heater</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Bleeding fuel system</li> <li>- Fuel pressure reduction</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pressure</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Battery voltage</li> <li>- Fuel consumption</li> <li>- Ignition angle reduction: cyl. 1</li> <li>- Ignition angle reduction: cyl. 2</li> <li>- Ignition angle reduction: cyl. 3</li> <li>- Ignition angle reduction: cyl. 4</li> <li>- Engine revolution</li> <li>- Transverse acceleration</li> <li>- Inserted gear</li> <li>- Engine status</li> <li>- Nominal parameters throttle valve</li> <li>- engine oil temperature</li> </ul> </li> </ul>



- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:

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Engine control  
Motronic MED 17.5 UDS

number

- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation: counter

- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.

factor

- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass

meter

- Air leakage
- Long-term throttle valve adaptation to air mass

meter

- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque

power loss

- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value

- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum
- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed
- Throttle valve position 2
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Coolant temp. at engine start
- Magnetic clutch monitoring

				<ul style="list-style-type: none"> <li>- Temperature sensor downstream of radiator:</li> <li>Raw voltage</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- Turbo charger air circulation valve</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Fuel quantity control valve</li> <li>- Radiator fan controller 1</li> <li>- Electric fuel pump control unit</li> <li>- Compressor control flap</li> <li>- Aux coolant pump</li> <li>- Evaporative emission control regeneration valve</li> <li>- Wastegate solenoid valve</li> <li>- Actuator structure-borne noise</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> <li>- Evaporative emission control regeneration valve</li> <li>- Camshaft timing control (B1), inlet</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Basic adjustment throttle valve</li> <li>- Activate/deactivate cruise control</li> <li>- Compressor magnetic clutch basic setting</li> <li>- Compressor control flap basic setting</li> <li>- Activate/deactivate passenger compartment supplementary heater</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Bleeding fuel system</li> <li>- Fuel pressure reduction</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pressure</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Battery voltage</li> <li>- Fuel consumption</li> <li>- Ignition angle reduction: cyl. 1</li> <li>- Ignition angle reduction: cyl. 2</li> <li>- Ignition angle reduction: cyl. 3</li> <li>- Ignition angle reduction: cyl. 4</li> <li>- Engine revolution</li> <li>- Transverse acceleration</li> <li>- Inserted gear</li> <li>- Engine status</li> <li>- Nominal parameters throttle valve</li> <li>- engine oil temperature</li> <li>- Air mass, nominal value</li> <li>- Turbo pressure, nominal value</li> <li>- Turbo pressure, actual value</li> <li>- Intake air temperature</li> <li>- Engine oil level</li> <li>- Torque limitation</li> <li>- Oxygen sensor voltage (bank 1-sensor 1)</li> <li>- Oxygen sensor voltage (bank 1-sensor 2)</li> <li>- Set value, high fuel pressure</li> <li>- Fuel level (quantity)</li> <li>- Short-term mixture correction, bank 1</li> <li>- Long-term mixture correction, bank 1</li> <li>- Cooling agent temperature motor</li> </ul> </li> </ul>

- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:  
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:  
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.  
factor
- Throttle valve position: absolute
- Throttle valve position: standardised

2012/04	CTHF	1.4	150	Engine control Motronic MED 17.5 UDS	<ul style="list-style-type: none"> <li>- Ambient air pressure</li> <li>- Conversion check: Measured value</li> <li>- Conversion check: Result</li> <li>- Torque loss adaption</li> <li>- Throttle valve adaption: Result</li> <li>- Short-term throttle valve adaption to air mass meter</li> <li>- Air leakage</li> <li>- Long-term throttle valve adaptation to air mass meter</li> <li>- Charge-air pressure control: set value</li> <li>- Intake manifold pressure, raw value</li> <li>- Ignition timing adjustment, cyl. 1</li> <li>- Absolute suction pressure</li> <li>- Equivalence ratio: set value</li> <li>- Mileage since fault memory cleared</li> <li>- Distance covered with active MIL</li> <li>- Status, initial filling, fuel tank</li> <li>- Time since engine start</li> <li>- Absolute load value</li> <li>- Standardised load rating</li> <li>- Starter control: Interlock or P/N signal</li> <li>- Average injection time</li> <li>- Engine start: start synchronisation</li> <li>- Camshaft position: Start of phase window</li> <li>- Accelerator switch positions</li> <li>- Auxiliary system torque request</li> <li>- ACC specified acceleration</li> <li>- Evap.emiss.ctrl. control valve: specified position</li> <li>- Test steps still to be implemented</li> <li>- Long-term mixture correction/idle (B1)</li> <li>- Crankshaft angle / quantity control valve closed</li> <li>- Crankshaft angle / quantity control valve opened</li> <li>- Fuel HP regulation: Adaptation value</li> <li>- High pressure fuel pump: delivery volume</li> <li>- Total vehicle mileage</li> <li>- Total control unit mileage</li> <li>- Torque loss adaptation: Idle</li> <li>- Adaptation A/C compressor torque power loss</li> <li>- Adaptation of transmission torque power loss</li> <li>- Adaptation transmission and compressor torque power loss</li> <li>- Ignition angle retard: mean value</li> <li>- Reference moment, misfire detection</li> <li>- EVAP system: adaptation factor</li> <li>- Irregular CU deactivations: counter reading</li> <li>- Compressor control flap actuation</li> <li>- EVAP diagnosis: actuation duty cycle</li> <li>- EVAP diagnosis: differential pressure ratio</li> <li>- EVAP diagnosis: Result correlation factor</li> <li>- Knock sensor test: short trip result</li> <li>- Idle speed control: Requested torque change</li> <li>- Long-term adjustment LR bank 1</li> <li>- Load value: set value</li> <li>- Fuel pump: set value</li> <li>- Kick-down shift point adaptation</li> <li>- Inlet camshaft timing actuation (b1)</li> <li>- Level detection test result</li> <li>- Camshaft actuator actual/specified angle difference</li> <li>- Calculated torque reduction on transmission intervention</li> <li>- Internal torque set value formation</li> <li>- Compressor test</li> <li>- Accelerator pedal travel</li> <li>- Accelerator pedal position 2</li> <li>- Test EVAP valve: Result</li> <li>- Inlet camshaft control test (b1): result</li> </ul>
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- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum
- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed
- Throttle valve position 2
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Coolant temp. at engine start
- Magnetic clutch monitoring
- Temperature sensor downstream of radiator:
- Raw voltage
- **Actuators**
- Air conditioner electromagnetic clutch - compressor
- Turbo charger air circulation valve
- Inlet camshaft timing control (bank 1)
- Fuel quantity control valve
- Radiator fan controller 1
- Electric fuel pump control unit
- Compressor control flap
- Aux coolant pump
- Evaporative emission control regeneration valve

- Wastegate solenoid valve
- Actuator structure-borne noise

SEAT				Leon [1P1] - Leon 1.8 TSI	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code</li> </ul> </li> </ul>



2009/03  
-  
2012/12

CDA

1.8

160

Tire control system  
Tire pressure monitor 4.0

received

- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded

					<ul style="list-style-type: none"> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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SEAT					Leon [1P1] - Leon 2.0 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> </ul>	

- **Error memory**

- **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle,

2009/03 - 2012/12	CEGA	2.0	170	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle,</li> </ul>
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				<p>partially loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> </ul> </li> </ul>

- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded

2010/05 - 2011/05	CFHC	2.0	140	Tire control system Tire pressure monitor 4.0	<p>loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently</li> </ul>
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				<p>monitored wheel set</p> <ul style="list-style-type: none"> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> </ul> </li> </ul>



2010/05  
-  
2012/12

CFJA

2.0

170

Tire control system  
Tire pressure monitor 4.0

- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle,

partially loaded

- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified

				<p>pressure</p> <ul style="list-style-type: none"> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel</li> </ul> </li> </ul>

2011/06  
-  
2012/12

CLCB

2.0

140

Tire control system  
Tire pressure monitor 4.0

position received

- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded

					<ul style="list-style-type: none"> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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SEAT					Leon [1P1] - Leon 2.0 FSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Adjustments / settings</li> </ul>	

- Tire pressure monitor individual specified pressure adjustment
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - CAN communication
  - Supply voltage term.30
  - Tire pressure monitoring status
  - Transportation mode
  - System status
  - Inflation pressure sensor 1 Temperature
  - Inflation pressure sensor 2 Temperature
  - Inflation pressure sensor 3 Temperature
  - Inflation pressure sensor 4 Temperature
  - Inflation pressure sensor 1 Sensor code
  - Inflation pressure sensor 2 Sensor code
  - Inflation pressure sensor 3 Sensor code
  - Inflation pressure sensor 4 Sensor code
  - Radio interference
  - Load status selected
  - Warning: Check front left tire pressure
  - Warning: Check front right tire pressure
  - Tire pressure sensor 1: Actual pressure
  - Tire pressure sensor 1: Specified pressure
  - Tire pressure sensor 1: Wheel position
  - Tire pressure sensor 2: Actual pressure
  - Tire pressure sensor 2: Specified pressure
  - Tire pressure sensor 2: Wheel position
  - Tire pressure sensor 3: Actual pressure
  - Tire pressure sensor 3: Specified pressure
  - Tire pressure sensor 3: Wheel position
  - Designation wheel set 1
  - Designation wheel set 2
  - Designation wheel set 3
  - Designation wheel set 4
  - Designation wheel set 5
  - Designation wheel set 6
  - Designation wheel set 7
  - Designation wheel set 8
  - Designation wheel set 9
  - Designation wheel set 10
  - Currently monitored wheel set
  - Designation of currently monitored wheel set
  - Warning: Front left tire flat
  - Warning: Front right tire flat
  - Warning: Rear left tire flat
  - Warning: Rear right tire flat
  - Designation wheel set 11
  - Vehicle speed CAN message
  - CAN message voltage terminal 30
  - Tire pressure sensor: Last actual temperature received
  - Tire pressure sensor: Last actual pressure received
  - Tire pressure monitor sensor: Last wheel position received
  - Tire pressure monitor sensor: Last sensor code received
  - Tire pressure sensor 4: Actual pressure
  - Tire pressure sensor 4: Specified pressure
  - Tire pressure sensor 4: Wheel position
  - Wheel set 1 specified pressure, front axle, partially loaded
  - Wheel set 1 specified pressure, front axle, fully loaded
  - Wheel set 1 specified pressure, rear axle, partially loaded
  - Wheel set 1 specified pressure, rear axle, fully loaded

2009/05  
-  
2012/12

CDLD

2.0

241

Tire control system  
Tire pressure monitor 4.0

- loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded

					<p>loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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SEAT					Leon [1P1] - Leon 2.0 TFSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> </ul> </li> </ul>	



- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded

2009/06 - 2012/12	CCZB	2.0	211	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> </ul>
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					<ul style="list-style-type: none"> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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SEAT					Leon [1P1] - Leon 2.0 TFSI Cupra	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> </ul> </li> </ul>	

2009/09  
-  
2012/12

CDLA

2.0

265

Tire control system  
Tire pressure monitor 4.0

- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle,

- partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status

					<ul style="list-style-type: none"> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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SEAT					Leon [1P1] - Leon 1.6	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> </ul> </li> </ul>	

2009/12 - 2012/12	CHGA	1.6	102	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code received</li> <li>- Tire pressure sensor 4: Actual pressure</li> <li>- Tire pressure sensor 4: Specified pressure</li> <li>- Tire pressure sensor 4: Wheel position</li> <li>- Wheel set 1 specified pressure, front axle, partially loaded</li> <li>- Wheel set 1 specified pressure, front axle, fully loaded</li> <li>- Wheel set 1 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 1 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> </ul>
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- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure



				<ul style="list-style-type: none"> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code</li> </ul> </li> </ul>

2010/11  
-  
2012/12

CMXA

1.6

102

Tire control system  
Tire pressure monitor 4.0

received

- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded

					<ul style="list-style-type: none"> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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SEAT					Leon [1P1] - Leon 1.6 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified</li> </ul> </li> </ul>	

pressure adjustment

- **Error memory**

- **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded

2010/02 - 2012/12	CAYC	1.6	105	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> </ul>
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				<ul style="list-style-type: none"> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> </ul> </li> </ul>

- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded

2010/11 - 2012/12	CAYB	1.6	90	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> </ul>
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					<ul style="list-style-type: none"> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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SEAT					Leon [1P1] - Leon 1.4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> </ul> </li> </ul>	

2010/05  
-  
2012/12

CGGB

1.4

86

Tire control system  
Tire pressure monitor 4.0

- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded

loaded

- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure

					<ul style="list-style-type: none"> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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<b>SEAT</b>	<b>Leon [1P1] - Leon 1.2 TSI</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> </ul> </li> </ul>

2010/02  
-  
2012/12

CBZB

1.2

105

Tire control system  
Tire pressure monitor 4.0

- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle,

partially loaded

- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature
- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

SEAT				Leon [5F1] - Leon 1.4 TSI	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> <li>- Evaporative emission control regeneration valve</li> <li>- Camshaft timing control (B1), inlet</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Basic adjustment throttle valve</li> <li>- Activate/deactivate cruise control</li> <li>- Compressor magnetic clutch basic setting</li> <li>- Compressor control flap basic setting</li> <li>- Activate/deactivate passenger compartment supplementary heater</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Bleeding fuel system</li> <li>- Fuel pressure reduction</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pressure</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Battery voltage</li> <li>- Fuel consumption</li> <li>- Ignition angle reduction: cyl. 1</li> <li>- Ignition angle reduction: cyl. 2</li> <li>- Ignition angle reduction: cyl. 3</li> <li>- Ignition angle reduction: cyl. 4</li> <li>- Engine revolution</li> <li>- Transverse acceleration</li> <li>- Inserted gear</li> <li>- Engine status</li> <li>- Nominal parameters throttle valve</li> <li>- engine oil temperature</li> <li>- Air mass, nominal value</li> <li>- Turbo pressure, nominal value</li> <li>- Turbo pressure, actual value</li> <li>- Intake air temperature</li> <li>- Engine oil level</li> <li>- Torque limitation</li> <li>- Oxygen sensor voltage (bank 1-sensor 1)</li> <li>- Oxygen sensor voltage (bank 1-sensor 2)</li> <li>- Set value, high fuel pressure</li> <li>- Fuel level (quantity)</li> <li>- Short-term mixture correction, bank 1</li> <li>- Long-term mixture correction, bank 1</li> <li>- Cooling agent temperature motor</li> <li>- Idle running speed target value</li> <li>- Gas pedal position sensor 1 Voltage</li> <li>- Gas pedal position sensor 2 Voltage</li> <li>- Longitudinal acceleration</li> <li>- Rate correction factor</li> <li>- Tempomat speed (required value)</li> <li>- Lambda probe heating resistance (B1, S1)</li> <li>- Lambda probe heating resistance (B1, S2)</li> <li>- Radiator fan 1 control</li> <li>- "Oil minimum" warning</li> </ul> </li> </ul>

Engine control  
Motronic MED 17.5 UDS

- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:  
number
  - Oxygen sensor (b1,s2): Ri limit value
  - Oxygen sensor (b1,s1): characteristics offset
  - Oxygen sensor (b1,S1) fast offset adaptation:  
counter
    - Oxygen sensor (b1,s1): Ceramics temperature
    - Oxygen sensor ageing check (S2): result
    - Operating instructions
    - Catalytic converter O2 capacity: measured
    - Catalytic converter O2 capacity: ageing corr.  
factor
      - Throttle valve position: absolute
      - Throttle valve position: standardised
      - Ambient air pressure
      - Conversion check: Measured value
      - Conversion check: Result
      - Torque loss adaption
      - Throttle valve adaption: Result
      - Short-term throttle valve adaption to air mass  
meter
        - Air leakage
        - Long-term throttle valve adaptation to air mass  
meter



- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1

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<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> </ul> </li> </ul>				

- Key switch position
- Ignition circuit windowbag driver's side
- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value

Airbag  
Airbag AB 20 UDS

- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1:

					<p>Ohm value</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> </ul> <p>2</p> <ul style="list-style-type: none"> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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SEAT						Leon [5F1] - Leon 1.2 TSI					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> <li>- Evaporative emission control regeneration valve</li> <li>- Camshaft timing control (B1), inlet</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Basic adjustment throttle valve</li> <li>- Activate/deactivate cruise control</li> <li>- Compressor magnetic clutch basic setting</li> <li>- Compressor control flap basic setting</li> <li>- Activate/deactivate passenger compartment supplementary heater</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Bleeding fuel system</li> <li>- Fuel pressure reduction</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pressure</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Battery voltage</li> <li>- Fuel consumption</li> <li>- Ignition angle reduction: cyl. 1</li> <li>- Ignition angle reduction: cyl. 2</li> <li>- Ignition angle reduction: cyl. 3</li> <li>- Ignition angle reduction: cyl. 4</li> <li>- Engine revolution</li> <li>- Transverse acceleration</li> <li>- Inserted gear</li> <li>- Engine status</li> <li>- Nominal parameters throttle valve</li> <li>- engine oil temperature</li> <li>- Air mass, nominal value</li> <li>- Turbo pressure, nominal value</li> </ul> </li> </ul>					

- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:  
number
- Oxygen sensor (b1,s2): Ri limit value

Engine control  
Motronic MED 17.5 UDS

- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation: counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr. factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass meter
- Air leakage
- Long-term throttle valve adaptation to air mass meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)

2012/12

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1.2

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- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum
- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed
- Throttle valve position 2
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Coolant temp. at engine start
- Magnetic clutch monitoring
- Temperature sensor downstream of radiator: Raw voltage



	<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Air conditioner electromagnetic clutch - compressor</li> <li>- Turbo charger air circulation valve</li> <li>- Inlet camshaft timing control (bank 1)</li> <li>- Fuel quantity control valve</li> <li>- Radiator fan controller 1</li> <li>- Electric fuel pump control unit</li> <li>- Compressor control flap</li> <li>- Aux coolant pump</li> <li>- Evaporative emission control regeneration valve</li> <li>- Wastegate solenoid valve</li> <li>- Actuator structure-borne noise</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> </ul>

Airbag  
Airbag AB 20 UDS

- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit

					<ul style="list-style-type: none"> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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SEAT				Leon [5F1] - Leon 1.6 TDI	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> </ul> </li> </ul>

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Airbag  
Airbag AB 20 UDS

- Ignition circuit pretensioner front passenger side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status

- Right belt tensioner fault status
  - Driver side rollover protection trigger
  - Passenger side rollover protection trigger
  - Passenger side rollover protection trigger: Ohm value
  - Driver side rollover protection trigger: Ohm value
  - Right belt tensioner: Terminal 15
  - Right belt tensioner: Power supply
  - Right belt tensioner: Current input
  - Left belt tensioner: Current input
  - Left belt tensioner: Terminal 15
  - Left belt tensioner: Power supply
  - Left belt tensioner: Temperature
  - Right belt tensioner: Temperature
  - Left belt tensioner: tensioning cycle characteristic 1
  - Left belt tensioner: tensioning cycle characteristic 2
  - Left belt tensioner: tensioning cycle characteristic 3
  - Left belt tensioner: tensioning cycle characteristic 4
  - Right belt tensioner: tensioning cycle characteristic 1
  - Right belt tensioner: tensioning cycle characteristic 2
  - Right belt tensioner: tensioning cycle characteristic 3
  - Right belt tensioner: tensioning cycle characteristic 4
  - Driving profile selection functional status
  - Driving profile switching
  - HV battery ignition circuit open circuit
  - HV battery ignition circuit open circuit ohm value
  - Passenger side airbag exhaust valve ignition circuit
  - Passenger side airbag exhaust valve ign.circuit ohm value
  - Status: Key-operated switch contact 1
  - Status: Key-operated switch contact 2
  - Driver side rear belt tensioner ignition circuit
  - Passenger side rear belt tensioner ignition circuit
  - Driver side pedestrian protection trigger ignition circuit
  - Passenger side pedestrian protection trigger ignition circuit
  - Driver side front airbag ignition circuit 1: Ohm value
  - Driver side seat position sensor status
  - Passenger side front seat position sensor status
  - Supply voltage status
  - Rear driver side side airbag ignition circuit
  - Rear passenger side side airbag ignition circuit
  - Passenger side front airbag ignition circuit 1: Ohm value
  - Seat belt lock switch center 2 row
  - 2nd row, driver side, buckle switch
  - 2nd row, passenger side, buckle switch
  - Ignition circuit, Battery disconnection
  - 3rd row driver side buckle switch
  - 3rd row passenger side buckle switch
  - Seat occupied sensor fault status
  - Ignition circuit 2, belt tensioner, front driver side
  - Ignition circuit 2, belt tensioner, front passenger side
- **Actuators**

				<ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front <ul style="list-style-type: none"> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> </ul> </li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front <ul style="list-style-type: none"> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> </ul> </li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side <ul style="list-style-type: none"> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> </ul> </li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance <ul style="list-style-type: none"> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> </ul> </li> </ul> </li> </ul>

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Airbag  
Airbag AB 20 UDS

- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value

					<ul style="list-style-type: none"> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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SEAT					Leon [5F1] - Leon 2.0 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> </ul> </li> </ul>	



2012/10 -	CKFC	2.0	150	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front pass. side:Ohm value</li> <li>- Driver side front belt force limiter ign.circuit: Ohm value</li> <li>- Passenger side front belt force limiter ign.circuit: Ohm value</li> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm</li> </ul>
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value

- Driver side rollover protection trigger: Ohm

value

- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle

characteristic 1

- Left belt tensioner: tensioning cycle

characteristic 2

- Left belt tensioner: tensioning cycle

characteristic 3

- Left belt tensioner: tensioning cycle

characteristic 4

- Right belt tensioner: tensioning cycle

characteristic 1

- Right belt tensioner: tensioning cycle

characteristic 2

- Right belt tensioner: tensioning cycle

characteristic 3

- Right belt tensioner: tensioning cycle

characteristic 4

- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition

circuit

- Passenger side airbag exhaust valve ign.circuit

ohm value

- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition

circuit

- Passenger side pedestrian protection trigger

ignition circuit

- Driver side front airbag ignition circuit 1: Ohm

value

- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1:

Ohm value

- Seat belt lock switch center 2 row
- 2nd row, driver side, buckle switch
- 2nd row, passenger side, buckle switch
- Ignition circuit, Battery disconnection
- 3rd row driver side buckle switch
- 3rd row passenger side buckle switch
- Seat occupied sensor fault status
- Ignition circuit 2, belt tensioner, front driver side

2

- Ignition circuit 2, belt tensioner, front passenger

side

• **Actuators**

- Failure lamp
- Collision signal
- Airbag indicator light OFF
- Activate component protection

- Crash signal/all belt tensioners
- Anti-roll bar triggering
- Vehicle conditioning

**SEAT Leon [5F5] - Leon SC 1.2 TSI**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> <li>- Evaporative emission control regeneration valve</li> <li>- Camshaft timing control (B1), inlet</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Basic adjustment throttle valve</li> <li>- Activate/deactivate cruise control</li> <li>- Compressor magnetic clutch basic setting</li> <li>- Compressor control flap basic setting</li> <li>- Activate/deactivate passenger compartment supplementary heater</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Bleeding fuel system</li> <li>- Fuel pressure reduction</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pressure</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Battery voltage</li> <li>- Fuel consumption</li> <li>- Ignition angle reduction: cyl. 1</li> <li>- Ignition angle reduction: cyl. 2</li> <li>- Ignition angle reduction: cyl. 3</li> <li>- Ignition angle reduction: cyl. 4</li> <li>- Engine revolution</li> <li>- Transverse acceleration</li> <li>- Inserted gear</li> <li>- Engine status</li> <li>- Nominal parameters throttle valve</li> <li>- engine oil temperature</li> <li>- Air mass, nominal value</li> <li>- Turbo pressure, nominal value</li> <li>- Turbo pressure, actual value</li> <li>- Intake air temperature</li> <li>- Engine oil level</li> <li>- Torque limitation</li> <li>- Oxygen sensor voltage (bank 1-sensor 1)</li> <li>- Oxygen sensor voltage (bank 1-sensor 2)</li> <li>- Set value, high fuel pressure</li> <li>- Fuel level (quantity)</li> <li>- Short-term mixture correction, bank 1</li> <li>- Long-term mixture correction, bank 1</li> <li>- Cooling agent temperature motor</li> <li>- Idle running speed target value</li> <li>- Gas pedal position sensor 1 Voltage</li> <li>- Gas pedal position sensor 2 Voltage</li> <li>- Longitudinal acceleration</li> <li>- Rate correction factor</li> <li>- Tempomat speed (required value)</li> <li>- Lambda probe heating resistance (B1, S1)</li> </ul> </li> </ul>

- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:  
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:  
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.
- factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass  
meter

Engine control  
Motronic MED 17.5 UDS

- Air leakage
- Long-term throttle valve adaptation to air mass meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle

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- Accelerator pedal: limitation
  - Throttle valve air mass flow
  - Knock sensor voltage Cylinder 1
  - Knock sensor voltage Cylinder 2
  - Knock sensor voltage Cylinder 3
  - Knock sensor voltage Cylinder 4
  - CAM: Deviation from reference position
  - Magnetic clutch actuation duty cycle
  - A/C compressor refrigerant pressure
  - Compressor control flap: actual/specified angle difference
  - ESP reduced required torque
  - ESP increased required torque
  - Oxygen sensor heating (B1, S1), actuation
  - Oxygen sensor heating (B1, S2), actuation
  - Fuel low pressure: Adaptation value
  - Drive specified torque
  - Crankshaft specified torque
  - Lambda control (b1): Part load adaptation value
  - Brake booster pressure raw value
  - Temperature sensor 1 compressor 2, raw value
  - Dew point, heat quantity (b1,s1), model value
  - Dew point, heat quantity (b1,s2), model value
  - Dew point end, counter start (b1,s1)
  - Dew point end, counter start (b1,s2)
  - Brake booster pressure actual value
  - Pressure upstream of charging module, raw value
  - Brake booster pump test: Result
  - Lateral acceleration raw value
  - Intake manifold intake air temperature, raw value
  - Intake air temperature upstream of throttle valve: raw value
  - Time since terminal 15 off
  - Combustion chamber air charge: Set value
  - Brake booster vacuum
  - Travel time with MIL activated
  - Brake booster vacuum pump
  - Lambda control deactivation
  - Exh. gas temperat. sensor (bank 1, sensor 1)
  - Camshaft speed
  - Throttle valve position 2
  - Missfire detection counter Cylinder 1
  - Missfire detection counter Cylinder 2
  - Missfire detection counter Cylinder 3
  - Missfire detection counter Cylinder 4
  - Coolant temp. at engine start
  - Magnetic clutch monitoring
  - Temperature sensor downstream of radiator:
- Raw voltage
- **Actuators**
    - Air conditioner electromagnetic clutch - compressor
    - Turbo charger air circulation valve
    - Inlet camshaft timing control (bank 1)
    - Fuel quantity control valve
    - Radiator fan controller 1
    - Electric fuel pump control unit
    - Compressor control flap
    - Aux coolant pump
    - Evaporative emission control regeneration valve
    - Wastegate solenoid valve
    - Actuator structure-borne noise

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**

- Data registration
- Seat occupation detection
- Power supply Clamp 15
- Key switch position
- Ignition circuit windowbag driver's side
- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side
- front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side
- front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side
- front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value

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- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status



					<ul style="list-style-type: none"> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1:</li> </ul> <p>Ohm value</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> </ul> <p>2</p> <ul style="list-style-type: none"> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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SEAT				Toledo [KG3] - Toledo 1.4 TSI	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Generate readiness code</li> <li>- catalytic system effectiveness, bank 1</li> <li>- Lambda sensor ageing (bank 1, sensor 1)</li> <li>- Lambda probe ageing (B1, S2)</li> <li>- Evaporative emission control regeneration valve</li> <li>- Camshaft timing control (B1), inlet</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Basic adjustment throttle valve</li> <li>- Activate/deactivate cruise control</li> <li>- Compressor magnetic clutch basic setting</li> <li>- Compressor control flap basic setting</li> <li>- Activate/deactivate passenger compartment supplementary heater</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Fuel tank emptying</li> <li>- Bleeding fuel system</li> <li>- Fuel pressure reduction</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pressure</li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Fuel temperature</li> <li>- Battery voltage</li> <li>- Fuel consumption</li> <li>- Ignition angle reduction: cyl. 1</li> <li>- Ignition angle reduction: cyl. 2</li> <li>- Ignition angle reduction: cyl. 3</li> <li>- Ignition angle reduction: cyl. 4</li> <li>- Engine revolution</li> <li>- Transverse acceleration</li> <li>- Inserted gear</li> <li>- Engine status</li> <li>- Nominal parameters throttle valve</li> </ul> </li> </ul>

- engine oil temperature
- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value

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- Oxygen sensor (b1,s1) dynamic checks: number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation: counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr. factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass meter
- Air leakage
- Long-term throttle valve adaptation to air mass meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value

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- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum
- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed
- Throttle valve position 2
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Coolant temp. at engine start

- Magnetic clutch monitoring
- Temperature sensor downstream of radiator:

Raw voltage

**• Actuators**

- Air conditioner electromagnetic clutch - compressor
- Turbo charger air circulation valve
- Inlet camshaft timing control (bank 1)
- Fuel quantity control valve
- Radiator fan controller 1
- Electric fuel pump control unit
- Compressor control flap
- Aux coolant pump
- Evaporative emission control regeneration valve
- Wastegate solenoid valve
- Actuator structure-borne noise

**• Identification**

**• Clear errors**

**• Error memory**

**• Current values**

- Data registration
- Seat occupation detection
- Power supply Clamp 15
- Key switch position
- Ignition circuit windowbag driver's side
- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm

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value  
- Passenger side windowbag ignition circuit: Ohm value  
value  
- Driver side front kneebag ignition circuit: Ohm value  
value  
- Passenger side front kneebag ignition circuit: Ohm value  
value  
- Driver side front belt tensioner ign.circuit: Ohm value  
value  
- Passenger side front belt tensioner ign.circuit: Ohm value  
value  
- Ignition circuit 2,belt tensioner,front driver side:Ohm value  
value  
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value  
value  
- Driver side front belt force limiter ign.circuit: Ohm value  
value  
- Passenger side front belt force limiter ign.circuit: Ohm value  
value  
- Driver side rear belt tensioner ign.circuit: Ohm value  
value  
- Passenger side rear belt tensioner ign.circuit: Ohm value  
value  
- Battery isolator ignition circuit: Ohm value  
value  
- Driver side front seat position sensor: Current value  
value  
- Passenger side front seat position sensor: Current value  
value  
- Driver side 2nd row belt switch: Ohm value  
value  
- Passenger side 2nd row belt switch: Ohm value  
value  
- 2nd row center belt switch: Ohm value  
value  
- Driver side 3rd row belt switch: Ohm value  
value  
- Passenger side 3rd row belt switch: Ohm value  
value  
- Driver side front buckle switch: Ohm value  
value  
- Passenger side front buckle switch: Ohm value  
value  
- Seat occupied sensor: Ohm value  
value  
- Driving profile selection system status  
value  
- Left belt tensioner fault status  
value  
- Right belt tensioner fault status  
value  
- Driver side rollover protection trigger  
value  
- Passenger side rollover protection trigger  
value  
- Passenger side rollover protection trigger: Ohm value  
value  
- Driver side rollover protection trigger: Ohm value  
value  
- Right belt tensioner: Terminal 15  
value  
- Right belt tensioner: Power supply  
value  
- Right belt tensioner: Current input  
value  
- Left belt tensioner: Current input  
value  
- Left belt tensioner: Terminal 15  
value  
- Left belt tensioner: Power supply  
value  
- Left belt tensioner: Temperature  
value  
- Right belt tensioner: Temperature  
value  
- Left belt tensioner: tensioning cycle characteristic 1  
value  
- Left belt tensioner: tensioning cycle characteristic 2  
value  
- Left belt tensioner: tensioning cycle characteristic 3  
value  
- Left belt tensioner: tensioning cycle characteristic 4  
value  
- Right belt tensioner: tensioning cycle characteristic 1  
value  
- Right belt tensioner: tensioning cycle characteristic 2  
value  
- Right belt tensioner: tensioning cycle characteristic 3  
value  
- Right belt tensioner: tensioning cycle characteristic 4

					<ul style="list-style-type: none"> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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SEAT				Toledo [KG3] - Toledo 1.2	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> </ul> </li> </ul>

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- Ignition circuit side airbag front passenger side front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value



- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1: Ohm value
- Seat belt lock switch center 2 row
- 2nd row, driver side, buckle switch
- 2nd row, passenger side, buckle switch
- Ignition circuit, Battery disconnection
- 3rd row driver side buckle switch
- 3rd row passenger side buckle switch
- Seat occupied sensor fault status
- Ignition circuit 2, belt tensioner, front driver side

					<ul style="list-style-type: none"> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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<b>SEAT</b>	<b>Toledo [KG3] - Toledo 1.2 TSI</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> </ul> </li> </ul>

2012/07 -	CBZA	1.2	86	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front pass. side:Ohm value</li> <li>- Driver side front belt force limiter ign.circuit: Ohm value</li> <li>- Passenger side front belt force limiter ign.circuit: Ohm value</li> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> </ul>
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					<ul style="list-style-type: none"> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side 2</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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SEAT					Toledo [KG3] - Toledo 1.6 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> </ul> </li> </ul>	

2012/07  
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CAYC

1.6

105

Airbag  
Airbag AB 20 UDS

- Ignition circuit side airbag front passenger side front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value

- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1: Ohm value
- Seat belt lock switch center 2 row
- 2nd row, driver side, buckle switch
- 2nd row, passenger side, buckle switch
- Ignition circuit, Battery disconnection
- 3rd row driver side buckle switch
- 3rd row passenger side buckle switch
- Seat occupied sensor fault status
- Ignition circuit 2, belt tensioner, front driver side

					<ul style="list-style-type: none"> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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<b>SEAT</b>	<b>Toledo [KG3] - Toledo 1.6</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> </ul> </li> </ul>

2012/07 -	CFNA	1.6	105	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front pass. side:Ohm value</li> <li>- Driver side front belt force limiter ign.circuit: Ohm value</li> <li>- Passenger side front belt force limiter ign.circuit: Ohm value</li> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> </ul>
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					<ul style="list-style-type: none"> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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[Octavia \[1Z3\] - Octavia 1.4](#)  
[Octavia \[1Z3\] - Octavia 1.6](#)  
[Octavia \[1Z3\] - Octavia 1.6 FSI](#)  
[Octavia \[1Z3\] - Octavia 2.0 FSI](#)  
[Octavia \[1Z3\] - Octavia 1.9 TDI](#)  
[Octavia \[1Z3\] - Octavia 2.0 TDI](#)  
[Octavia \[1Z3\] - Octavia 2.0 RS](#)  
[Octavia \[1Z3\] - Octavia 1.9 TDI 4x4](#)  
[Octavia \[1Z3\] - Octavia 2.0 FSI 4x4](#)  
[Octavia \[1Z3\] - Octavia 2.0 TDI RS](#)  
[Octavia \[1Z3\] - Octavia 1.8 TSI](#)  
[Octavia \[1Z3\] - Octavia 1.6 TDI](#)  
[Octavia \[1Z3\] - Octavia 1.4 TSI](#)  
[Octavia \[1Z3\] - Octavia 1.2 TSI](#)  
[Octavia \[1Z3\] - Octavia 2.0 TDI 4x4](#)  
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[Octavia \[1Z5\] Combi - Octavia 1.9 TDI Combi 4x4](#)  
[Octavia \[1Z5\] Combi - Octavia 1.9 TDI Combi](#)  
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[Octavia \[1Z5\] Combi - Octavia 1.6 Combi](#)  
[Octavia \[1Z5\] Combi - Octavia 1.6 FSI Combi](#)  
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[Octavia \[1Z5\] Combi - Octavia 2.0 FSI Combi](#)  
[Octavia \[1Z5\] Combi - Octavia 2.0 Combi RS](#)  
[Octavia \[1Z5\] Combi - Octavia 2.0 TDI Combi 4x4](#)  
[Octavia \[1Z5\] Combi - Octavia 2.0 TDI Combi RS](#)  
[Octavia \[1Z5\] Combi - Octavia 1.8 TSI Combi](#)  
[Octavia \[1Z5\] Combi - Octavia 1.6 TDI Combi](#)  
[Octavia \[1Z5\] Combi - Octavia 1.4 TSI Combi](#)  
[Octavia \[1Z5\] Combi - Octavia 1.8 TSI Combi 4x4](#)  
[Octavia \[1Z5\] Combi - Octavia 1.2 TSI Combi](#)  
[Octavia \[1Z5\] Combi - Octavia 1.6 TDI Combi 4x4](#)  
[Octavia \[1Z5\] Combi - Octavia 2.0 TSI Combi RS](#)  
[Octavia \[5E3\] - Octavia 1.4 TSI](#)  
[Octavia \[5E3\] - Octavia 1.8 TSI](#)  
[Octavia \[5E3\] - Octavia 1.2 TSI](#)  
[Octavia \[5E3\] - Octavia 2.0 TDI](#)  
[Octavia \[5E3\] - Octavia 1.6 TDI](#)  
[Octavia \[5E5\] Combi - Octavia 1.2 TSI Combi](#)  
[Octavia \[5E5\] Combi - Octavia 1.4 TSI Combi](#)  
[Octavia \[5E5\] Combi - Octavia 1.6 TDI Combi](#)  
[Octavia \[5E5\] Combi - Octavia 1.8 TSI Combi](#)  
[Octavia \[5E5\] Combi - Octavia 2.0 TDI Combi](#)  
[Superb \[3T4\] - Superb 3.6 V6 4x4](#)  
[Superb \[3T4\] - Superb 1.9 TDI](#)

[Superb \[3T4\] - Superb 2.0 TDI](#)  
[Superb \[3T4\] - Superb 1.8 TSI](#)  
[Superb \[3T4\] - Superb 1.4 TSI](#)  
[Superb \[3T4\] - Superb 1.8 TSI 4x4](#)  
[Superb \[3T4\] - Superb 2.0 TDI 4x4](#)  
[Superb \[3T4\] - Superb 2.0 TSI](#)  
[Superb \[3T4\] - Superb 1.6 TDI](#)  
[Superb \[3T4\] - Superb 1.4i](#)  
[Superb \[3T5\] Combi - Superb 1.4 TSI Combi](#)  
[Superb \[3T5\] Combi - Superb 1.8 TSI Combi](#)  
[Superb \[3T5\] Combi - Superb 1.8 TSI Combi 4x4](#)  
[Superb \[3T5\] Combi - Superb 1.9 TDI Combi](#)  
[Superb \[3T5\] Combi - Superb 2.0 TDI Combi](#)  
[Superb \[3T5\] Combi - Superb 3.6 V6 Combi 4x4](#)  
[Superb \[3T5\] Combi - Superb 2.0 TDI Combi 4x4](#)  
[Superb \[3T5\] Combi - Superb 2.0 TSI Combi](#)  
[Superb \[3T5\] Combi - Superb 1.6 TDI Combi](#)  
[Superb \[3T8\] - Superb 2.0i](#)  
[Yeti \[5L7\] - Yeti 2.0 TDI 4x4](#)  
[Yeti \[5L7\] - Yeti 1.8 TSI 4x4](#)  
[Yeti \[5L7\] - Yeti 1.2 TSI](#)  
[Yeti \[5L7\] - Yeti 2.0 TDI](#)

Year	Engine	Liters	HP	System	Functions
2004/05 - 2010/12	BCA	1.4	75	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system <ul style="list-style-type: none"> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul> </li> </ul>
2006/05 -	BUD	1.4	80	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2010/11 -	CGGA	1.4	80	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

SKODA					Octavia [1Z3] - Octavia 1.6	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>	

2004/05 - 2005/05	BGU	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2005/05 -	BSE	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2007/11 - 2010/05	CCSA	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b></li> </ul>

2009/08 -	CHGA	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- Bleed</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2010/05 -	CMXA	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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**SKODA Octavia [1Z3] - Octavia 1.6 FSI**

Year	Engine	Liters	HP	System	Functions
2004/05 - 2008/10	BLF	1.6	115	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

**SKODA Octavia [1Z3] - Octavia 2.0 FSI**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> </ul>

2004/11 - 2005/11	BLR	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2004/12 - 2005/11	BLY	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2005/11 - 2008/10	BVY	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

SKODA					Octavia [1Z3] - Octavia 1.9 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>	

2004/05 - 2010/12	BJB	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2004/05 - 2006/02	BKC	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> </ul> </li> </ul>

2006/05 - 2010/05	BLS	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- ESP indicator</li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2006/03 -	BXE	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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**SKODA Octavia [1Z3] - Octavia 2.0 TDI**

Year	Engine	Liters	HP	System	Functions
2004/05 - 2010/05	BKD	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> </ul> </li> </ul>

2005/11 - 2010/05	BMM	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> </ul> </li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2010/03 -	CLCA	2.0	110	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> </ul> </li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> </ul>

					<ul style="list-style-type: none"> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2010/02 -	CLCB	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>



2010/05 -	CFHC	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2011/02 -	CFHF	2.0	110	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> </ul> </li> </ul>

- ESP indicator

SKODA					
Octavia [1Z3] - Octavia 2.0 RS					
Year	Engine	Liters	HP	System	Functions
2005/10 - 2008/10	BWA	2.0	200	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"><li>• <b>Identification</b></li><li>• <b>Clear errors</b></li><li>• <b>Adjustments / settings</b><ul style="list-style-type: none"><li>- Brake pressure sensor zero pos. calibration</li><li>- Lateral acceleration sensor zero position adjustment</li><li>- Longitudinal acceleration sensor zero position adaptation</li><li>- Steering angle initialization</li><li>- Variant encoding</li></ul></li><li>• <b>Special functions</b><ul style="list-style-type: none"><li>- Bleed</li></ul></li><li>• <b>Error memory</b></li><li>• <b>Current values</b><ul style="list-style-type: none"><li>- stop lights switch</li><li>- front left tire speed</li><li>- front right tire speed</li><li>- rear right tire speed</li><li>- rear left tire speed</li><li>- Transverse acceleration pressure sensor</li><li>- Driving wheels angle</li><li>- reflexive angle</li><li>- Communication with engine management system</li><li>- Longitudinal acceleration</li><li>- Brakes control light</li><li>- ABS control light</li><li>- Tire monitoring, button</li><li>- ESP button</li><li>- Steering wheel angle sensor, status</li><li>- Brake booster vacuum chamber</li><li>- Brake booster working chamber</li><li>- Communication with instrument panel</li><li>- Commun. with strng. wh. angle sensor</li><li>- Communication with gateway</li><li>- Comm. with power strng. control unit</li><li>- Communication with transmission control unit</li><li>- Communication with 4WD system</li><li>- Communication with access system/immobilizer</li><li>- ESP indicator</li></ul></li></ul>

SKODA					
Octavia [1Z3] - Octavia 1.9 TDI 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"><li>• <b>Identification</b></li><li>• <b>Clear errors</b></li><li>• <b>Adjustments / settings</b><ul style="list-style-type: none"><li>- Brake pressure sensor zero pos. calibration</li><li>- Lateral acceleration sensor zero position adjustment</li><li>- Longitudinal acceleration sensor zero position adaptation</li><li>- Steering angle initialization</li><li>- Variant encoding</li></ul></li><li>• <b>Special functions</b><ul style="list-style-type: none"><li>- Bleed</li></ul></li><li>• <b>Error memory</b></li><li>• <b>Current values</b></li></ul>

2006/05 - 2010/05	BLS	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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SKODA Octavia [1Z3] - Octavia 2.0 FSI 4x4					
Year	Engine	Liters	HP	System	Functions
2004/12 - 2005/11	BLX	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2005/11 - 2008/10	BVX	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

SKODA					
Octavia [1Z3] - Octavia 2.0 TDI RS					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

2006/04 - 2008/05	BMN	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2008/05 -	CEGA	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> </ul> </li> </ul>

- ESP indicator

SKODA					Octavia [1Z3] - Octavia 1.8 TSI	
Year	Engine	Liters	HP	System	Functions	
2007/06 - 2008/10	BZB	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>	

2008/11 -	CDAA	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2009/03 -	CDAB	1.8	152	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
2009/06 -	CAYC	1.6	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

SKODA Octavia [1Z3] - Octavia 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>



2008/11 -	CAXA	1.4	122	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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SKODA						Octavia [1Z3] - Octavia 1.2 TSI					
Year	Engine	Liters	HP	System	Functions						
2010/02 -	CBZB	1.2	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> </ul> </li> </ul>						

- ESP indicator

SKODA				Octavia [1Z3] - Octavia 2.0 TDI 4x4	
Year	Engine	Liters	HP	System	Functions
2010/05 -	CFHC	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"><li>• <b>Identification</b></li><li>• <b>Clear errors</b></li><li>• <b>Adjustments / settings</b><ul style="list-style-type: none"><li>- Brake pressure sensor zero pos. calibration</li><li>- Lateral acceleration sensor zero position adjustment</li><li>- Longitudinal acceleration sensor zero position adaptation</li><li>- Steering angle initialization</li><li>- Variant encoding</li></ul></li><li>• <b>Special functions</b><ul style="list-style-type: none"><li>- Bleed</li></ul></li><li>• <b>Error memory</b></li><li>• <b>Current values</b><ul style="list-style-type: none"><li>- stop lights switch</li><li>- front left tire speed</li><li>- front right tire speed</li><li>- rear right tire speed</li><li>- rear left tire speed</li><li>- Transverse acceleration</li><li>- pressure sensor</li><li>- Driving wheels angle</li><li>- reflexive angle</li><li>- Communication with engine management system</li><li>- Longitudinal acceleration</li><li>- Brakes control light</li><li>- ABS control light</li><li>- Tire monitoring, button</li><li>- ESP button</li><li>- Steering wheel angle sensor, status</li><li>- Brake booster vacuum chamber</li><li>- Brake booster working chamber</li><li>- Communication with instrument panel</li><li>- Commun. with strng. wh. angle sensor</li><li>- Communication with gateway</li><li>- Comm. with power strng. control unit</li><li>- Communication with transmission control unit</li><li>- Communication with 4WD system</li><li>- Communication with access system/immobilizer</li><li>- ESP indicator</li></ul></li></ul>

SKODA				Octavia [1Z3] - Octavia 2.0 TSI RS	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"><li>• <b>Identification</b></li><li>• <b>Clear errors</b></li><li>• <b>Adjustments / settings</b><ul style="list-style-type: none"><li>- Brake pressure sensor zero pos. calibration</li><li>- Lateral acceleration sensor zero position adjustment</li><li>- Longitudinal acceleration sensor zero position adaptation</li><li>- Steering angle initialization</li><li>- Variant encoding</li></ul></li><li>• <b>Special functions</b><ul style="list-style-type: none"><li>- Bleed</li></ul></li><li>• <b>Error memory</b></li><li>• <b>Current values</b></li></ul>

2008/11 -	CCZA	2.0	200	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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SKODA					
Octavia [1Z5] Combi - Octavia 2.0 FSI Combi 4x4					
Year	Engine	Liters	HP	System	Functions
2004/11 - 2005/11	BLX	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2005/11 - 2008/10	BVX	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

SKODA Octavia [1Z5] Combi - Octavia 1.9 TDI Combi 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

2004/11 -	BKC	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2006/05 - 2010/05	BLS	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> </ul> </li> </ul>

					- ESP indicator
2006/03 -	BXE	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

SKODA					
Octavia [1Z5] Combi - Octavia 1.9 TDI Combi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>

2004/11 - 2006/02	BKC	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2004/05 - 2010/12	BJB	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> </ul>

2006/05 - 2010/05	BLS	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2004/11 -	BXE	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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<b>SKODA</b>	<b>Octavia [1Z5] Combi - Octavia 1.4 Combi</b>
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Year	Engine	Liters	HP	System	Functions
2004/05 - 2006/06	BCA	1.4	75	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> </ul> </li> </ul>

2006/05 -	BUD	1.4	80	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- Steering angle initialization</li> <li>- Variant encoding</li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2010/11 -	CGGA	1.4	80	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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**SKODA Octavia [1Z5] Combi - Octavia 1.6 Combi**

Year	Engine	Liters	HP	System	Functions
2004/05 - 2005/05	BGU	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> </ul>

2005/05 -	BSE	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2007/11 - 2010/05	CCSA	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> <li>• <b>Special functions</b></li> <li>- Bleed</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2009/08 -	CHGA	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2010/05 -	CMXA	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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SKODA Octavia [1Z5] Combi - Octavia 1.6 FSI Combi					
Year	Engine	Liters	HP	System	Functions
2004/05 - 2008/10	BLF	1.6	115	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> </ul> </li> <li>system <ul style="list-style-type: none"> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
2004/05 - 2010/05	AZV	2.0	136	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2005/11 - 2010/05	BMM	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2010/03 -	CLCA	2.0	110	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> </ul> </li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> </ul> </li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position</li> </ul> </li> </ul>



2010/02 -	CLCB	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>adaptation <ul style="list-style-type: none"> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> </ul> </li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2010/05 -	CFHC	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> </ul> </li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> </ul> </li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2011/02 -	CFHF	2.0	110	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

SKODA					
Octavia [1Z5] Combi - Octavia 2.0 FSI Combi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> </ul>

2004/11 - 2005/11	BLR	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2004/12 - 2005/11	BLY	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2005/11 - 2008/10	BVY	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

SKODA					Octavia [1Z5] Combi - Octavia 2.0 Combi RS	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> </ul> </li> </ul>	

2005/10 - 2008/10	BWA	2.0	200	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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SKODA Octavia [1Z5] Combi - Octavia 2.0 TDI Combi 4x4					
Year	Engine	Liters	HP	System	Functions
2005/12 - 2010/05	BMM	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2010/05 -	CFHC	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2011/05 -	CFHF	2.0	110	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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SKODA Octavia [1Z5] Combi - Octavia 2.0 TDI Combi RS					
Year	Engine	Liters	HP	System	Functions
2006/04 - 2008/05	BMN	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

2008/05 -	CEGA	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
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SKODA Octavia [1Z5] Combi - Octavia 1.8 TSI Combi					
Year	Engine	Liters	HP	System	Functions
2007/06 - 2008/10	BZB	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2008/11 -	CDA	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> </ul>

2009/05 -	CDAB	1.8	152	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
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SKODA Octavia [1Z5] Combi - Octavia 1.6 TDI Combi					
Year	Engine	Liters	HP	System	Functions
2009/06 -	CAYC	1.6	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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SKODA						Octavia [1Z5] Combi - Octavia 1.4 TSI Combi					
Year	Engine	Liters	HP	System	Functions						
2008/11 -	CAXA	1.4	122	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>						

SKODA						Octavia [1Z5] Combi - Octavia 1.8 TSI Combi 4x4					
Year	Engine	Liters	HP	System	Functions						
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>						

2008/11 -	CDAA	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2009/03 -	CDAB	1.8	152	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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**SKODA Octavia [1Z5] Combi - Octavia 1.2 TSI Combi**

Year	Engine	Liters	HP	System	Functions
2010/02 -	CBZB	1.2	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

**SKODA Octavia [1Z5] Combi - Octavia 1.6 TDI Combi 4x4**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

2009/06 -	CAYC	1.6	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
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SKODA Octavia [1Z5] Combi - Octavia 2.0 TSI Combi RS					
Year	Engine	Liters	HP	System	Functions
2008/11 -	CCZA	2.0	200	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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<b>SKODA</b>	<b>Octavia [5E3] - Octavia 1.4 TSI</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side</li> </ul> </li> <li>front           <ul style="list-style-type: none"> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> </ul> </li> <li>side           <ul style="list-style-type: none"> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side</li> </ul> </li> <li>front           <ul style="list-style-type: none"> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side</li> </ul> </li> <li>front           <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> </ul> </li> <li>side           <ul style="list-style-type: none"> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm</li> </ul> </li> </ul>

2012/11  
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CHPA

1.4

140

Airbag  
Airbag AB 20 UDS

value

- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle



					<p>characteristic 4</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 1</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 2</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 3</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 4</p> <ul style="list-style-type: none"> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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SKODA					Octavia [5E3] - Octavia 1.8 TSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values</li> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> </ul>	

- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value

2012/11 -	CJSA	1.8	180	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> </ul>
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					<ul style="list-style-type: none"> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> </ul> <p>2</p> <ul style="list-style-type: none"> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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SKODA					Octavia [5E3] - Octavia 1.2 TSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> </ul> <p>side</p> <ul style="list-style-type: none"> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side</li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side</li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> </ul> <p>side</p> <ul style="list-style-type: none"> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm</li> </ul>	

2012/11  
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CJZA

1.2

105

Airbag  
Airbag AB 20 UDS

value

- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle

					<p>characteristic 4</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 1</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 2</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 3</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 4</p> <ul style="list-style-type: none"> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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SKODA					Octavia [5E3] - Octavia 2.0 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values</li> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> </ul>	

- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side
- front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side
- front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side
- front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value

2012/11 -	CKFB	2.0	143	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> </ul>
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					<ul style="list-style-type: none"> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> </ul> <p>2</p> <ul style="list-style-type: none"> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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SKODA					Octavia [5E3] - Octavia 1.6 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side</li> </ul> </li> <li>front           <ul style="list-style-type: none"> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> </ul> </li> <li>side           <ul style="list-style-type: none"> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side</li> </ul> </li> <li>front           <ul style="list-style-type: none"> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side</li> </ul> </li> <li>front           <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> </ul> </li> <li>side           <ul style="list-style-type: none"> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> </ul> </li> <li>resistance           <ul style="list-style-type: none"> <li>- Driver side pedestrian protection ign.circuit</li> <li>- Passenger side pedestrian protection ign.circuit</li> </ul> </li> <li>resistance           <ul style="list-style-type: none"> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> </ul> </li> <li>value           <ul style="list-style-type: none"> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> </ul> </li> <li>Ohm value           <ul style="list-style-type: none"> <li>- Driver side front side airbag ignition circuit: Ohm</li> </ul> </li> </ul>	

2012/11  
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CLHA

1.6

105

Airbag  
Airbag AB 20 UDS

value

- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle

					<p>characteristic 4</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 1</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 2</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 3</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 4</p> <ul style="list-style-type: none"> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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SKODA					Octavia [5E5] Combi - Octavia 1.2 TSI Combi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values</li> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> </ul>	

- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side
- front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side
- front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side
- front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- value

2012/11 -	CJZA	1.2	105	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> </ul>
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					<ul style="list-style-type: none"> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> </ul> <p>2</p> <ul style="list-style-type: none"> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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<b>SKODA</b>	<b>Octavia [5E5] Combi - Octavia 1.4 TSI Combi</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side</li> </ul> </li> <li>front           <ul style="list-style-type: none"> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> </ul> </li> <li>side           <ul style="list-style-type: none"> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side</li> </ul> </li> <li>front           <ul style="list-style-type: none"> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side</li> </ul> </li> <li>front           <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> </ul> </li> <li>side           <ul style="list-style-type: none"> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm</li> </ul> </li> </ul>

2012/11  
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CHPA

1.4

140

Airbag  
Airbag AB 20 UDS

value

- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle

					<p>characteristic 4</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 1</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 2</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 3</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 4</p> <ul style="list-style-type: none"> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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SKODA Octavia [5E5] Combi - Octavia 1.6 TDI Combi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> </ul> </li> </ul>



- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side
- front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side
- front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side
- front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- value

2012/11 -	CLHA	1.6	105	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> </ul>
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					<ul style="list-style-type: none"> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> </ul> <p>2</p> <ul style="list-style-type: none"> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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SKODA					Octavia [5E5] Combi - Octavia 1.8 TSI Combi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side</li> </ul> </li> <li>front <ul style="list-style-type: none"> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> </ul> </li> <li>side <ul style="list-style-type: none"> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side</li> </ul> </li> <li>front <ul style="list-style-type: none"> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side</li> </ul> </li> <li>front <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> </ul> </li> <li>side <ul style="list-style-type: none"> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> </ul> </li> <li>resistance <ul style="list-style-type: none"> <li>- Driver side pedestrian protection ign.circuit</li> <li>- Passenger side pedestrian protection ign.circuit</li> </ul> </li> <li>resistance <ul style="list-style-type: none"> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm</li> </ul> </li> </ul>	

2012/11  
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CJSA

1.8

180

Airbag  
Airbag AB 20 UDS

value

- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle

					<p>characteristic 4</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 1</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 2</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 3</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 4</p> <ul style="list-style-type: none"> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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SKODA					Octavia [5E5] Combi - Octavia 2.0 TDI Combi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values</li> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> </ul>	

- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side
- front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side
- front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side
- front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value

2012/11 -	CKFB	2.0	143	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> </ul>
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					<ul style="list-style-type: none"> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> </ul> <p>2</p> <ul style="list-style-type: none"> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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SKODA					Superb [3T4] - Superb 3.6 V6 4x4	
Year	Engine	Liters	HP	System	Functions	
2008/11	CDVA	3.6	260	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul>	



					<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
				Anti-block system ESP Teves Mk60.1	

SKODA					Superb [3T4] - Superb 1.9 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>	

2008/03 - 2010/09	BLS	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2008/03 - 2010/11	BXE	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
2008/03 - 2010/03	BMP	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2008/06 - 2010/05	CBBB	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2009/01 - 2010/03	BKD	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> </ul> </li> <li>system <ul style="list-style-type: none"> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> </ul> </li> </ul>

2010/02 -	CLJA	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- Steering angle initialization</li> <li>- Variant encoding</li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2010/03 -	CFFB	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2010/05 -	CFGB	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

SKODA					Superb [3T4] - Superb 1.8 TSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> </ul>	

2008/03 - 2009/05	BZB	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2008/09 -	CDAA	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2009/03 -	CDAB	1.8	152	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

SKODA					
Superb [3T4] - Superb 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> </ul> </li> </ul>



2008/04 -	CAXC	1.4	125	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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SKODA Superb [3T4] - Superb 1.8 TSI 4x4					
Year	Engine	Liters	HP	System	Functions
2008/11 -	CDA A	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2009/03 -	CDAB	1.8	152	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

SKODA						Superb [3T4] - Superb 2.0 TDI 4x4					
Year	Engine	Liters	HP	System	Functions						
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> </ul> </li> </ul>						

2008/09 - 2010/05	CBBB	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2010/05 -	CFGB	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

2010/11 -	CFFB	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
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SKODA Superb [3T4] - Superb 2.0 TSI					
Year	Engine	Liters	HP	System	Functions
2010/05 -	CCZA	2.0	200	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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SKODA					
Superb [3T4] - Superb 1.6 TDI					
Year	Engine	Liters	HP	System	Functions
2010/09 -	CAYC	1.6	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

SKODA				Superb [3T4] - Superb 1.4i	
Year	Engine	Liters	HP	System	Functions
2010/05 -	CFB	1.4	131	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

SKODA				Superb [3T5] Combi - Superb 1.4 TSI Combi	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> </ul> </li> </ul>

2009/09 -	CAXC	1.4	125	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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SKODA Superb [3T5] Combi - Superb 1.8 TSI Combi					
Year	Engine	Liters	HP	System	Functions
2009/09 -	CDAA	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2009/03 -	CDAB	1.8	152	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

SKODA					
Superb [3T5] Combi - Superb 1.8 TSI Combi 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> </ul> </li> </ul>



2009/09 -	CDAA	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2009/03 -	CDAB	1.8	152	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
2009/09 - 2010/09	BLS	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2009/09 - 2010/11	BXE	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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SKODA					
Superb [3T5] Combi - Superb 2.0 TDI Combi					
Year	Engine	Liters	HP	System	Functions
2009/09 - 2010/03	BKD	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

2009/09 - 2010/05	CBBB	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2010/02 -	CLJA	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2010/03	CFFB	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b></li> </ul>

2010/05 -	CFGB	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- Bleed</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
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SKODA					
Superb [3T5] Combi - Superb 3.6 V6 Combi 4x4					
Year	Engine	Liters	HP	System	Functions
2009/09 -	CDVA	3.6	260	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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**SKODA Superb [3T5] Combi - Superb 2.0 TDI Combi 4x4**

Year	Engine	Liters	HP	System	Functions
2009/09 - 2010/05	CBBB	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> </ul>

2010/05 -	CFGB	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2010/11 -	CFFB	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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SKODA Superb [3T5] Combi - Superb 2.0 TSI Combi					
Year	Engine	Liters	HP	System	Functions
2010/05	CCZA	2.0	200	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

SKODA Superb [3T5] Combi - Superb 1.6 TDI Combi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> </ul> </li> </ul>

2010/09 -	CAYC	1.6	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- Variant encoding</li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
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SKODA Superb [3T8] - Superb 2.0i					
Year	Engine	Liters	HP	System	Functions
2009/08 -	CGM	2.0	200	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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<b>SKODA</b>	<b>Yeti [5L7] - Yeti 2.0 TDI 4x4</b>
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Year	Engine	Liters	HP	System	Functions
2009/05 - 2009/11	CBDB	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> </ul> </li> </ul>

2009/11 -	CFHC	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- Variant encoding</li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>
2010/05 -	CFJA	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2009/11 - 2010/05	CEGA	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul> </li> </ul>

SKODA					Yeti [5L7] - Yeti 1.8 TSI 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>	

2009/05 -	CDAA	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
2009/11 -	CDAB	1.8	152	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Steering angle initialization</li> <li>- Variant encoding</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> </ul> </li> </ul>

- ESP indicator

SKODA				Yeti [5L7] - Yeti 1.2 TSI	
Year	Engine	Liters	HP	System	Functions
2009/09 -	CBZB	1.2	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"><li>• <b>Identification</b></li><li>• <b>Clear errors</b></li><li>• <b>Adjustments / settings</b><ul style="list-style-type: none"><li>- Brake pressure sensor zero pos. calibration</li><li>- Lateral acceleration sensor zero position adjustment</li><li>- Longitudinal acceleration sensor zero position adaptation</li><li>- Steering angle initialization</li><li>- Variant encoding</li></ul></li><li>• <b>Special functions</b><ul style="list-style-type: none"><li>- Bleed</li></ul></li><li>• <b>Error memory</b></li><li>• <b>Current values</b><ul style="list-style-type: none"><li>- stop lights switch</li><li>- front left tire speed</li><li>- front right tire speed</li><li>- rear right tire speed</li><li>- rear left tire speed</li><li>- Transverse acceleration</li><li>- pressure sensor</li><li>- Driving wheels angle</li><li>- reflexive angle</li><li>- Communication with engine management system</li><li>- Longitudinal acceleration</li><li>- Brakes control light</li><li>- ABS control light</li><li>- Tire monitoring, button</li><li>- ESP button</li><li>- Steering wheel angle sensor, status</li><li>- Brake booster vacuum chamber</li><li>- Brake booster working chamber</li><li>- Communication with instrument panel</li><li>- Commun. with strng. wh. angle sensor</li><li>- Communication with gateway</li><li>- Comm. with power strng. control unit</li><li>- Communication with transmission control unit</li><li>- Communication with 4WD system</li><li>- Communication with access system/immobilizer</li><li>- ESP indicator</li></ul></li></ul>

SKODA				Yeti [5L7] - Yeti 2.0 TDI	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"><li>• <b>Identification</b></li><li>• <b>Clear errors</b></li><li>• <b>Adjustments / settings</b><ul style="list-style-type: none"><li>- Brake pressure sensor zero pos. calibration</li><li>- Lateral acceleration sensor zero position adjustment</li><li>- Longitudinal acceleration sensor zero position adaptation</li><li>- Steering angle initialization</li><li>- Variant encoding</li></ul></li><li>• <b>Special functions</b><ul style="list-style-type: none"><li>- Bleed</li></ul></li><li>• <b>Error memory</b></li><li>• <b>Current values</b></li></ul>

2009/11 -	CFHA	2.0	110	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Transverse acceleration</li> <li>- pressure sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Communication with engine management system</li> <li>- Longitudinal acceleration</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Tire monitoring, button</li> <li>- ESP button</li> <li>- Steering wheel angle sensor, status</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- Communication with instrument panel</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with gateway</li> <li>- Comm. with power strng. control unit</li> <li>- Communication with transmission control unit</li> <li>- Communication with 4WD system</li> <li>- Communication with access system/immobilizer</li> <li>- ESP indicator</li> </ul>
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[4-Runner \[N18\] - 4-Runner 2.7](#)  
[4-Runner \[N18\] - 4-Runner 2.7i](#)  
[4-Runner \[N18\] - 4-Runner 3.4i](#)  
[4-Runner \[N18\] - 4-Runner 2.7 4x4](#)  
[4-Runner \[N21\] - 4-Runner 4.0i](#)  
[4-Runner \[N21\] - 4-Runner 4.0i 4x4](#)  
[4-Runner \[N21\] - 4-Runner 4.7i 4x4](#)  
[4-Runner \[N21\] - 4-Runner 4.7i](#)  
[Avalon - Avalon 3.0i 24V](#)  
[Avalon - Avalon 3.0](#)  
[Avalon \[MCX10R\] - Avalon 3.0i 24V](#)  
[Avensis Verso - Avensis Verso 2.0 Diesel Turbo](#)  
[Avensis Verso - Avensis Verso 2.0i 16V](#)  
[Avensis Verso - Avensis Verso 2.4i 16V](#)  
[Avensis \[T22\] - Avensis 1.6i 16V](#)  
[Avensis \[T22\] - Avensis 1.8i 16V](#)  
[Avensis \[T22\] - Avensis 2.0i 16V](#)  
[Avensis \[T22\] - Avensis 2.0 Diesel Turbo](#)  
[Avensis \[T22\] Liftback - Avensis 1.6i 16V Liftback](#)  
[Avensis \[T22\] Liftback - Avensis 1.8i 16V Liftback](#)  
[Avensis \[T22\] Liftback - Avensis 2.0i 16V Liftback](#)  
[Avensis \[T22\] Liftback - Avensis 2.0 Diesel Turbo Liftback](#)  
[Avensis \[T22\] Wagon - Avensis 1.6i 16V Wagon](#)  
[Avensis \[T22\] Wagon - Avensis 1.8i 16V Wagon](#)  
[Avensis \[T22\] Wagon - Avensis 2.0i 16V Wagon](#)  
[Avensis \[T22\] Wagon - Avensis 2.0 Diesel Turbo Wagon](#)  
[Avensis \[T25\] - Avensis 1.8i 16V](#)  
[Avensis \[T25\] - Avensis 2.0i 16V](#)  
[Avensis \[T25\] - Avensis 1.6i 16V](#)  
[Avensis \[T25\] - Avensis 2.0i 16V 4WD](#)  
[Avensis \[T25\] - Avensis 2.0 Diesel Turbo](#)  
[Avensis \[T25\] - Avensis 2.4i](#)  
[Avensis \[T25\] Liftback - Avensis 1.6i 16V Liftback](#)  
[Avensis \[T25\] Liftback - Avensis 1.8i 16V Liftback](#)  
[Avensis \[T25\] Liftback - Avensis 2.0i 16V Liftback](#)  
[Avensis \[T25\] Liftback - Avensis 2.0 Diesel Turbo Liftback](#)  
[Avensis \[T25\] Liftback - Avensis 2.4i Liftback](#)  
[Avensis \[T25\] Wagon - Avensis 1.6i 16V Wagon](#)  
[Avensis \[T25\] Wagon - Avensis 1.8i 16V Wagon](#)  
[Avensis \[T25\] Wagon - Avensis 2.0i 16V Wagon](#)  
[Avensis \[T25\] Wagon - Avensis 2.0i 16V 4WD Wagon](#)  
[Avensis \[T25\] Wagon - Avensis 2.0 Diesel Turbo Wagon](#)  
[Avensis \[T25\] Wagon - Avensis 2.4i Wagon](#)  
[Avensis \[T27\] - Avensis 2.0](#)  
[Aygo - Aygo 1.0](#)  
[Camry - Camry 2.0i](#)

[Camry - Camry 2.2 CNG](#)  
[Camry - Camry 2.2](#)  
[Camry - Camry 2.0 i Sedan](#)  
[Camry - Camry 2.2 i Sedan](#)  
[Camry \[ACV36\] - Camry 2.4i](#)  
[Camry \[ACV40\] - Camry 2.4i](#)  
[Camry \[MCV20\] - Camry Vienta 3.0i](#)  
[Camry \[MCV36\] - Camry 3.0i](#)  
[Camry \[SXV20\] - Camry 2.2i](#)  
[Camry \[V1\] - Camry 3.0 i Sedan](#)  
[Camry \[V2\] - Camry 2.2i 16V](#)  
[Camry \[V2\] - Camry 3.0i 24V](#)  
[Camry \[V2\] - Camry 3.0i](#)  
[Camry \[V2\] - Camry 2.2i](#)  
[Camry \[V2\] Vienta Wagon - Camry Vienta Wagon 3.0i](#)  
[Camry \[V2\] Wagon - Camry Wagon 3.0i](#)  
[Camry \[V2\] Wagon - Camry Wagon 2.2i](#)  
[Camry \[V3\] - Camry 3.0i 24V](#)  
[Camry \[V3\] - Camry 2.4i 16V](#)  
[Camry \[V3\] - Camry 2.0i 16V](#)  
[Camry \[V3\] - Camry 2.4 i Sedan](#)  
[Camry \[V3\] - Camry 3.0 i Sedan](#)  
[Camry \[V3\] - Camry 2.4](#)  
[Camry \[V3\] - Camry 2.4i](#)  
[Camry \[V3\] - Camry 2.0i](#)  
[Camry \[V3\] - Camry 3.0i](#)  
[Camry \[V3\] - Camry 3.3](#)  
[Camry \[V3\] Wagon - Camry Wagon 2.4i](#)  
[Camry \[V40\] - Camry 2.4i](#)  
[Camry \[V40\] - Camry 2.4i 4WD](#)  
[Camry \[V4\] - Camry 2.4 VVT-i](#)  
[Camry \[XV30\] - Camry 2.4i](#)  
[Celica Convertible - Celica 2.2i 16V Convertible](#)  
[Celica Coupe - Celica Coupe 1.8i](#)  
[Celica Liftback - Celica Liftback 1.8i](#)  
[Celica Liftback - Celica 1.8i 16V Liftback](#)  
[Celica Liftback - Celica 2.2i 16V Liftback](#)  
[Celica \[T23\] Coupe - Celica 1.8i 16V Coupe](#)  
[Corolla - Corolla 1.8i](#)  
[Corolla - Corolla 1.8 i](#)  
[Corolla - Corolla 1.5i](#)  
[Corolla Altis - New Corolla Altis 1.6i](#)  
[Corolla Limo\[E12\] - Corolla Limo 1.6i](#)  
[Corolla \[E10\] Van - Corolla Van 2.2 Diesel 4WD](#)  
[Corolla \[E10\] Van - Corolla Van 2.2 Diesel](#)  
[Corolla \[E10\] Wagon - Corolla Wagon 2.2 Diesel](#)  
[Corolla \[E11, JT\] Liftback - Corolla 1.6i 16V Liftback](#)  
[Corolla \[E11, JT\] Liftback - Corolla 1.9 Diesel Liftback](#)

[Corolla \[E11, JT\] Liftback - Corolla 1.4i 16V Liftback](#)  
[Corolla \[E11, JT\] Liftback - Corolla 2.0 Diesel Turbo Liftback](#)  
[Corolla \[E11, SB\] Liftback - Corolla 1.6i 16V Liftback](#)  
[Corolla \[E11, SB\] Liftback - Corolla 1.9 Diesel Liftback](#)  
[Corolla \[E11, SB\] Liftback - Corolla 1.4i 16V Liftback](#)  
[Corolla \[E11\] - Corolla 1.6i 16V Sedan](#)  
[Corolla \[E11\] - Corolla 1.8i 16V](#)  
[Corolla \[E11\] - Corolla 1.8i 16V Sedan](#)  
[Corolla \[E11\] - Corolla 1.9 Diesel](#)  
[Corolla \[E11\] - Corolla 1.4i 16V Sedan](#)  
[Corolla \[E11\] - Corolla 1.6 i](#)  
[Corolla \[E11\] - Corolla 1.8 i](#)  
[Corolla \[E11\] - Corolla 2.0 Diesel Turbo](#)  
[Corolla \[E11\] - Corolla 1.6i](#)  
[Corolla \[E11\] - Corolla 2.2 Diesel](#)  
[Corolla \[E11\] - Corolla 2.2 Diesel 4WD](#)  
[Corolla \[E11\] Hatchback - Corolla 1.6i 16V Hatchback](#)  
[Corolla \[E11\] Hatchback - Corolla 1.9 Diesel Hatchback](#)  
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[Corolla \[E11\] Hatchback - Corolla 2.0 Diesel Turbo Hatchback](#)  
[Corolla \[E11\] Wagon - Corolla 1.6i 16V Wagon](#)  
[Corolla \[E11\] Wagon - Corolla 1.8i 16V Wagon 4x4](#)  
[Corolla \[E11\] Wagon - Corolla 1.4i 16V Wagon](#)  
[Corolla \[E11\] Wagon - Corolla 1.9 Diesel Wagon 4x4](#)  
[Corolla \[E11\] Wagon - Corolla 2.0 Diesel Turbo Wagon](#)  
[Corolla \[E11\] Wagon - Corolla 1.9 D Wagon](#)  
[Corolla \[E12, JTD\] - Corolla 1.6i 16V](#)  
[Corolla \[E12, JTD\] - Corolla 1.4i 16V](#)  
[Corolla \[E12, JTD\] - Corolla 1.4 Diesel Turbo](#)  
[Corolla \[E12, JTD\] Wagon - Corolla 1.6i 16V Wagon](#)  
[Corolla \[E12, JTD\] Wagon - Corolla 1.4i 16V Wagon](#)  
[Corolla \[E12, JTD\] Wagon - Corolla 2.0 Diesel Turbo Wagon](#)  
[Corolla \[E12, NMT\] - Corolla 1.6i](#)  
[Corolla \[E12, NMT\] - Corolla 2.0 Diesel Turbo](#)  
[Corolla \[E12, NMT\] Wagon - Corolla 1.6i Wagon](#)  
[Corolla \[E12, NMT\] Wagon - Corolla 1.4 Diesel Turbo Wagon](#)  
[Corolla \[E12\] - Corolla 1.4 i](#)  
[Corolla \[E12\] - Corolla 1.8 i](#)  
[Corolla \[E12\] - Corolla 1.8i 16V Sedan](#)  
[Corolla \[E12\] - Corolla 1.6i 16V Sedan](#)  
[Corolla \[E12\] - Corolla 1.8](#)  
[Corolla \[E12\] - Corolla 1.5i](#)  
[Corolla \[E12\] - Corolla 1.6 i](#)  
[Corolla \[E12\] - Corolla 2.0 Diesel Turbo Sedan](#)  
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[Corolla \[E12\] Hatchback - Corolla 2.0 Diesel Turbo Hatchback](#)  
[Corolla \[E12\] Hatchback - Corolla 1.4 Diesel Turbo Hatchback](#)  
[Corolla \[E12\] Runx - Corolla RunX 1.4 i](#)  
[Corolla \[E12\] Runx - Corolla RunX 1.8 i](#)  
[Corolla \[E12\] Runx - Corolla RunX 1.6 i](#)  
[Corolla \[E12\] Verso - Corolla Verso 1.8i 16V](#)  
[Corolla \[E12\] Verso - Corolla Verso 1.6i 16V](#)  
[Corolla \[E12\] Verso - Corolla Verso 2.0 Diesel Turbo](#)  
[Corolla \[E12\] Wagon - Corolla 1.8i 16V Wagon](#)  
[Corolla \[E9\] Wagon - Corolla 1.4 16V Wagon](#)  
[Corolla \[R11\] Verso - Corolla Verso 1.8i 16V](#)  
[Corolla \[R11\] Verso - Corolla Verso 1.6i 16V](#)  
[Corolla \[R1\] Verso - Corolla Verso 1.6i 16V](#)  
[Corolla \[R1\] Verso - Corolla Verso 1.8i 16V](#)  
[Crown - Crown 2.5i](#)  
[Crown - Crown 3.0i](#)  
[Duet - Duet 1.0i](#)  
[Duet - Duet 1.0i 4WD](#)  
[Echo - Echo 1.5i 16V](#)  
[Harrier - Harrier 3.3i 4WD](#)  
[Hiace - Hiace 2.7](#)  
[Hiace - Hiace 2.7 4x4](#)  
[Highlander - Highlander 2.4](#)  
[Highlander - Highlander 2.4 4x4](#)  
[Highlander - Highlander 3.0](#)  
[Highlander - Highlander 3.0 4x4](#)  
[Highlander - Highlander 3.3 4x4](#)  
[Highlander - Highlander 3.3](#)  
[Highlander - Highlander 3.5 4x4](#)  
[Highlander - Highlander 3.5](#)  
[Hilux - Hilux 3.0 TD 4x4](#)  
[Hilux - Hilux 3.0 Diesel Turbo 4x4](#)  
[Hilux - Hilux 2.7i](#)  
[Hilux - Hilux 3.4i](#)  
[Hilux - Hilux 2.4 Diesel Turbo 4WD](#)  
[Hilux - Hilux 2.0i 4WD](#)  
[Hilux - Hilux 2.4i Pickup 4x4](#)  
[Hilux Pickup - Hilux 2.4i Pickup 4x4](#)  
[Hilux Pickup - Hilux 2.4i Pickup 4WD](#)  
[Hilux Pickup - Hilux 2.4i Pickup](#)  
[Hilux Pickup - Hilux 2.5 Diesel Turbo Pickup 4x4](#)  
[Hilux Surf - Hilux Surf 3.0 Diesel Turbo 4WD](#)  
[Hilux Surf - Hilux Surf 2.4 Diesel Turbo 4WD](#)  
[Hilux Tiger - Hilux Tiger D4D 2.5 Diesel Turbo 4x4](#)  
[Hilux Wagon - Hilux 3.0i Wagon](#)  
[Hilux \[N25\] - Hilux 2.5 D-4D 4x4](#)

[Hilux \[N26\] - Hilux 3.0 D-4D 4x4](#)  
[Hilux \[N35\] - Hilux 2.5 D-4D](#)  
[Kluger - Kluger 3.3i](#)  
[Land Cruiser - Land Cruiser 4.5i 4WD](#)  
[Land Cruiser - Land Cruiser 4.7i 4WD](#)  
[Land Cruiser - Land Cruiser 4.5 4x4](#)  
[Land Cruiser Prado \[J12\] - Land Cruiser Prado 3.0 Diesel Turbo 4x4](#)  
[Land Cruiser Prado \[J9\] - Land Cruiser Prado 3.4i 24V](#)  
[Land Cruiser Prado \[J9\] - Land Cruiser Prado 2.7i 16V 4x4](#)  
[Land Cruiser Prado \[J9\] - Land Cruiser Prado 3.0 Diesel Turbo 4x4](#)  
[Land Cruiser \[J10\] - Land Cruiser 4.2 Diesel Turbo 4x4](#)  
[Land Cruiser \[J10\] - Land Cruiser 4.5i 24V](#)  
[Land Cruiser \[J20\] - Land Cruiser 4.6i 4x4](#)  
[Land Cruiser \[J20\] - Land Cruiser 4.5 D-4D 4x4](#)  
[Land Cruiser \[J6,J7,J10\] - Land Cruiser 4.7i 32V 4x4](#)  
[Land Cruiser \[J6,J7,J10\] - Land Cruiser 4.7i 4x4](#)  
[Land Cruiser \[J6,J7,J10\] - Land Cruiser 4.5 4x4](#)  
[Land Cruiser \[J6,J7,J10\] - Land Cruiser 4.0](#)  
[Land Cruiser \[J6,J7,J10\] - Land Cruiser 4.2 Diesel Turbo 4x4](#)  
[Land Cruiser \[J7\] - Land Cruiser 4.5i 24V](#)  
[Land Cruiser \[J7\] - Land Cruiser 4.2 Diesel 4x4](#)  
[Land Cruiser \[J8\] - Land Cruiser 4.0i](#)  
[Land Cruiser \[J8\] - Land Cruiser 4.5i 24V](#)  
[Land Cruiser \[J8\] - Land Cruiser 4.0i 4x4](#)  
[Land Cruiser \[J9\] - Land Cruiser 3.4i 24V](#)  
[Land Cruiser \[J9\] - Land Cruiser 3.0 Diesel Turbo Intercooler](#)  
[Land Cruiser \[J9\] - Land Cruiser 3.0 Diesel Turbo](#)  
[MR2 \[W3\] Cabrio - MR2 1.8 16V Cabrio](#)  
[Matrix - Matrix 1.8](#)  
[Matrix - Matrix 1.8 4x4](#)  
[Picnic - Picnic 2.0i](#)  
[Picnic - Picnic 2.0i 16V](#)  
[Picnic - Picnic 2.2 Diesel Turbo](#)  
[Previa - Previa 2.4i 16V 4x4](#)  
[Previa - Previa 2.4i](#)  
[Previa - Previa 2.4i 16V](#)  
[Previa - Previa 2.0 Diesel Turbo](#)  
[Prius - Prius 1.5i](#)  
[Prius \[W11\] - Prius 1.5i](#)  
[Prius \[W20\] - Prius 1.5i](#)  
[RAV4 - RAV4 2.0i 4WD](#)  
[RAV4 - RAV4 1.8i](#)  
[RAV4 - RAV4 2.4i 4x4](#)  
[RAV4 - RAV4 2.4i](#)  
[RAV4 - RAV4 2.4i 4WD](#)  
[RAV4 - RAV4 2.0i 16V](#)  
[RAV4 \[A1\] - RAV4 2.0i 16V 4x4](#)  
[RAV4 \[A1\] Cabrio - RAV4 2.0i 16V Cabrio 4x4](#)

[RAV4 \[A2\] - RAV4 1.8i 16V](#)  
[RAV4 \[A2\] - RAV4 2.0 VVT-i 4x4](#)  
[RAV4 \[A2\] - RAV4 2.4i](#)  
[RAV4 \[A2\] - RAV4 2.4i 4x4](#)  
[RAV4 \[A2\] - RAV4 2.0 VVT-i](#)  
[RAV4 \[A2\] - RAV4 2.0 Diesel Turbo](#)  
[RAV4 \[A3\] - RAV4 2.4 4X4](#)  
[RAV4 \[A3\] - RAV4 2.2 D-4D](#)  
[RAV4 \[A3\] - RAV4 2.0](#)  
[Reiz - Reiz 2.5i](#)  
[Reiz - Reiz 3.0i](#)  
[Sequoia - Sequoia 4.7](#)  
[Sequoia - Sequoia 4.7 4x4](#)  
[Sienna - Sienna 3.0](#)  
[Sienna - Sienna 3.3](#)  
[Sienna - Sienna 3.3 4x4](#)  
[Sienna - Sienna 3.5](#)  
[Solara Convertible - Solara 2.2 Convertible](#)  
[Solara Convertible - Solara 3.0 Convertible](#)  
[Solara Convertible - Solara 2.4 Convertible](#)  
[Solara Convertible - Solara 3.3 Convertible](#)  
[Solara Coupe - Solara 2.2 Coupe](#)  
[Solara Coupe - Solara 3.0 Coupe](#)  
[Solara Coupe - Solara 2.4 Coupe](#)  
[Solara Coupe - Solara 3.3 Coupe](#)  
[Soluna Vios - Soluna Vios 1.5i](#)  
[Starlet \[P8\] - Starlet 1.3i 16V](#)  
[Starlet \[P8\] - Starlet 1.3i 12V](#)  
[Starlet \[P9\] - Starlet 1.3i 16V](#)  
[Starlet \[P9\] - Starlet 1.3i 16V Turbo](#)  
[T100 - T100 2.7i 4x4](#)  
[Tacoma - Tacoma 2.4i](#)  
[Tacoma - Tacoma 3.4](#)  
[Tacoma - Tacoma 3.4 4x4](#)  
[Tacoma - Tacoma 2.7 4x4](#)  
[Tacoma - Tacoma 2.7i](#)  
[Tacoma - Tacoma 4.0 4x4](#)  
[Tacoma - Tacoma 2.7](#)  
[Tacoma - Tacoma 2.4i 4x4](#)  
[Tacoma - Tacoma 4.0](#)  
[Tundra - Tundra 4.7](#)  
[Tundra - Tundra 4.7 4x4](#)  
[Tundra - Tundra 3.4](#)  
[Tundra - Tundra 3.4 4x4](#)  
[VIOS - VIOS 1.3i](#)  
[VIOS - VIOS 1.5](#)  
[VIOS - VIOS 1.5i](#)  
[Wish - Wish 2.0i](#)

[Yaris - Yaris 1.0i 16V](#)

[Yaris - Yaris 1.3i 16V](#)

[Yaris - Yaris 1.5i 16V](#)

[Yaris - Yaris 1.3 VVT-i](#)

[Yaris Verso - Yaris Verso 1.5i 16V](#)

[Yaris Verso - Yaris Verso 1.3i 16V](#)

[Yaris \[P9, JTD\] - Yaris 1.0 VVT-i](#)

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> </ul> </li> </ul>



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Engine control  
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- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring

					<ul style="list-style-type: none"> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				4-Runner [N18] - 4-Runner 2.7i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> </ul> </li> </ul>

Engine control

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

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- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve

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- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode

Gear box control  
Transmission control ECT 2.2

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

					<ul style="list-style-type: none"> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					4-Runner [N18] - 4-Runner 3.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> </ul> </li> </ul>	

- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported



Engine control  
TCCS II V3

- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2

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- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter

Gear box control  
Transmission control ECT 2.2

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1

					<ul style="list-style-type: none"> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **4-Runner [N18] - 4-Runner 2.7 4x4**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> </ul> </li> </ul>

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Engine control  
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- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring

					<ul style="list-style-type: none"> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					4-Runner [N21] - 4-Runner 4.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> </ul> </li> </ul>	

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the



Engine control  
TCCS II V3

system

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact

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- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position

Gear box control  
Transmission control ECT 2.2

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

2002/09	1GRFE	4.0	321	<ul style="list-style-type: none"> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> </ul> </li> </ul>
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Gear box control  
Transmission control ECT 2.2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor



2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump

					<ul style="list-style-type: none"> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **4-Runner [N21] - 4-Runner 4.7i 4x4**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

2002/09 -	2UZFE	4.7	354	<ul style="list-style-type: none"> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b></li> </ul>				

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean

Gear box control  
Transmission control ECT 2.2

- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil

					<ul style="list-style-type: none"> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					4-Runner [N21] - 4-Runner 4.7i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal



- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation

2002/09 -	2UZFE	4.7	354	<ul style="list-style-type: none"> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status

					<ul style="list-style-type: none"> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Avalon - Avalon 3.0i 24V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> </ul> </li> </ul>	

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

Engine control  
TCCS II V3

- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve

1994/09 - 1999/08	1MZFE	3.0	192	<ul style="list-style-type: none"> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS



				<ul style="list-style-type: none"> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> </ul>

**• Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

Engine control  
TCCS II V3

- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve

2000/04 - 2002/12	1MZFE	3.0	197	<ul style="list-style-type: none"> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)

- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

					<ul style="list-style-type: none"> <li>- Ingestion control valve</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time



1995/03 - 2000/02	1MZFE	3.0	200 - 214	<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> </ul>

Gear box control  
Transmission control ECT 2.2

- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)

- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve

					<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Avalon - Avalon 3.0</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring

1998/09 - 2004/08	1MZFE	3.0	192	<ul style="list-style-type: none"> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> </ul>

- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich

Gear box control  
Transmission control ECT 2.2

- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air



					<ul style="list-style-type: none"> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Avalon [MCX10R] - Avalon 3.0i 24V</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)

- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor

2001/10 - 2002/12	1MZFE	3.0	197	<ul style="list-style-type: none"> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> <ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> </ul> </li> </ul>
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Gear box control  
Transmission control ECT 2.2

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

				<ul style="list-style-type: none"> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> </ul>

Engine control  
TCCS II V3

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor

2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump



2003/01 - 2005/06	1MZFE	3.0	197	<ul style="list-style-type: none"> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems

					<ul style="list-style-type: none"> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Avensis Verso - Avensis Verso 2.0 Diesel Turbo	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> </ul> </li> </ul>	

- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

2001/05 - 2005/07	1CDFTV	2.0	116	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> </ul>
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					<ul style="list-style-type: none"> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					
Avensis Verso - Avensis Verso 2.0i 16V					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> </ul> </li> </ul>

2001/05	1AZFE	2.0	150	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> </ul>
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- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve



					<ul style="list-style-type: none"> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Avensis Verso - Avensis Verso 2.4i 16V**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> </ul> </li> </ul>

2003/10 -	2AZFE	2.4	156	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> </ul>
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					<ul style="list-style-type: none"> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Avensis [T22] - Avensis 1.6i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> </ul> </li> </ul>	

- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

Engine control  
TCCS II V3

- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve

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- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)

Gear box control  
Transmission control ECT 2.2

- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU

- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test



- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode

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Gear box control  
Transmission control ECT 2.2

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay

					<ul style="list-style-type: none"> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Avensis [T22] - Avensis 1.8i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)

- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve

2000/07 - 2003/01	1ZZFE	1.8	129	<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring

				<ul style="list-style-type: none"> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> </ul> </li> </ul>



- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring

1997/10 - 2000/07	7AFE	1.8	110	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Avensis [T22] - Avensis 2.0i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

<p>2000/07 - 2003/01</p>	<p>1AZFSE</p>	<p>2.0</p>	<p>150</p>	<ul style="list-style-type: none"> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> <p><b>• Functional tests</b></p> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> </ul>
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- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1

				<ul style="list-style-type: none"> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> </ul> </li> </ul>



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Gear box control  
Transmission control ECT 2.2

- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)

- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1

					<ul style="list-style-type: none"> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Avensis [T22] - Avensis 2.0 Diesel Turbo**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> </ul> </li> </ul>

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2000/07

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Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system

				<ul style="list-style-type: none"> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> </ul> </li> </ul>

- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean

1999/08 - 2003/01	1CDFTV	2.0	116	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> </ul>
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					<ul style="list-style-type: none"> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Avensis [T22] Liftback - Avensis 1.6i 16V Liftback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> </ul> </li> </ul>	



Engine control  
TCCS II V3

- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status

- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

**• Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

**• Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

**• Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

Gear box control  
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode

			<ul style="list-style-type: none"> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> </ul> </li> </ul>

1997/10 - 2000/07	4AFE	1.6	110	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for ovedrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> </ul>
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- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

					<ul style="list-style-type: none"> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Avensis [T22] Liftback - Avensis 1.8i 16V Liftback**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> </ul> </li> </ul>



Engine control  
TCCS II V3

- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring

2000/07 - 2003/01	1ZZFE	1.8	129	<ul style="list-style-type: none"> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> </ul> </li> </ul>

- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system

Gear box control  
Transmission control ECT 2.2

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve

				<ul style="list-style-type: none"> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve
  - EGR stepper motor
  - Variable valve timing Bank 2
  - Air control valve control motor
  - Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for ovedrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> </ul> </li> </ul>



Engine control  
TCCS II V3

- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply

2000/07 - 2003/01	1AZFSE	2.0	150	<ul style="list-style-type: none"> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve

				<ul style="list-style-type: none"> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system

					<ul style="list-style-type: none"> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Avensis [T22] Liftback - Avensis 2.0 Diesel Turbo Liftback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> </ul> </li> </ul>	

- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich



1997/10 - 2000/07	2CTE	2.0	90	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> </ul> </li> </ul>
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				<ul style="list-style-type: none"> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode

- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

2000/07 - 2003/01	3ZZFE	1.6	110	<ul style="list-style-type: none"> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> </ul> </li> </ul>
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Gear box control  
Transmission control ECT 2.2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor



2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump

				<ul style="list-style-type: none"> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> </ul> </li> </ul>

<p>1997/10 - 2000/07</p>	<p>4AFE</p>	<p>1.6</p>	<p>110</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> </ul>
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					<ul style="list-style-type: none"> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Avensis [T22] Wagon - Avensis 1.8i 16V Wagon	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li><b>• Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li><b>• Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li><b>• Current values</b></li> </ul>	

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean

Engine control  
TCCS II V3

- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil

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2003/01

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- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve

Gear box control  
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)



- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

- **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

- **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed

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Gear box control  
Transmission control ECT 2.2

- Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode
  - Oxygen sensor (bank 2, sensor 1) Lambda actual value
  - Lambda sensor (B1,S1) Lambda actual value
  - LS (b1, s1) switch time rich to lean
  - LS (b2, s1) switch time rich to lean
  - LS (b1, s1) switch time lean to rich
  - LS (b2, s1) switch time lean to rich
  - Tank ventilation system: vapour pressure in the system
  - Throttle valve closing duty cycle
  - LS (b1,s2) switch time rich to lean
  - LS (b2,s2) switch time rich to lean
  - Oxygen sensor monitoring
  - Lean sensor current(bank 1,sensor 1)
  - Lean sensor current(bank 1,sensor 2)
  - Lean sensor mixture correction (B1,S1)
  - Lean sensor mixture correction (B1,S2)
  - Lambda control/Lambda sensor (B1,S2)
  - Lambda control/Lambda sensor (B1,S3)
  - Lambda control/Lambda sensor (B1,S4)
  - Lambda control, oxygen sensor (bank 2, sensor 2)
  - Lambda control/Lambda sensor (B2,S3)
  - Lambda control/Lambda sensor (B2,S4)
  - Air conditioner monitoring status
  - Oxygen sensor status (B1, S2)
  - Oxygen sensor status (bank 2, sensor 2)
  - Fuel shutoff status
  - Electrical power steering, signal
  - Air bypass solenoid valve
  - Oxygen sensor voltage (bank 1-sensor 3)
  - Oxygen sensor voltage (bank 1, sensor 4)
  - Oxygen sensor voltage (bank 2, sensor 3)
  - Oxygen sensor voltage (bank 2, sensor 4)
  - Evap. emissions control regulating valve status
  - Sports mode
  - Fault codes count
  - Throttle valve position 2
  - Solenoid switch valve DSU
  - Solenoid switch valve SLC
  - Solenoid shift valve SLD
  - Switch solenoid valve SLN
  - Solenoid shift valve SLS
  - Switch solenoid valve SLU
  - Catalytic converter control
  - Evapor. emission control monitoring
  - Secondary air system monitoring
  - Air conditioner monitoring
  - Lambda sensor heating circuit monitoring
  - Monitoring of sub-systems
  - Monitoring of fuel system
  - Misfire detection monitoring
  - EGR system monitoring
  - Evapor. emission control monitoring
  - Heated catalyt. converter monitoring
  - DK control motor actuation current 1
  - Gear down
  - System power mode status
  - Engine speed on misfiring
  - Engine load on misfiring
  - Throttle valve actuator power supply
  - Engine run time
- **Actuators**

					<ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Avensis [T22] Wagon - Avensis 2.0i 16V Wagon	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)

- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control

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- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status

Gear box control  
Transmission control ECT 2.2

- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring



				<ul style="list-style-type: none"> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> </ul> </li> </ul>

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

1997/10 - 2003/01	3SFE	2.0	128	Gear box control Transmission control ECT 2.2	<p>system</p> <ul style="list-style-type: none"> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA Avensis [T22] Wagon - Avensis 2.0 Diesel Turbo Wagon					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> </ul> </li> </ul>

<p>1997/10 - 2000/07</p>	<p>2CTE</p>	<p>2.0</p>	<p>90</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> </ul>
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- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2

					<ul style="list-style-type: none"> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply



					<ul style="list-style-type: none"> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA				Avensis [T25] - Avensis 1.8i 16V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> </ul>

Engine control  
TCCS II V3

- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)

- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve

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- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve

Gear box control  
Transmission control ECT 2.2

- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring

					<ul style="list-style-type: none"> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Avensis [T25] - Avensis 2.0i 16V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b></li> </ul>

- Adaptive parameters reset
- Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode
  - Oxygen sensor (bank 2, sensor 1) Lambda actual value

Engine control  
TCCS II V3

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system



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- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement

Gear box control  
Transmission control ECT 2.2

- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)

- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor

					<ul style="list-style-type: none"> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Avensis [T25] - Avensis 1.6i 16V</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring

2003/01 - 2008/11	3ZZFE	1.6	110	<ul style="list-style-type: none"> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control



					<ul style="list-style-type: none"> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Avensis [T25] - Avensis 2.0i 16V 4WD**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> </ul> </li> </ul>

<p>2003/09 - 2008/11</p>	<p>1AZFSE</p>	<p>2.0</p>	<p>155</p>	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> </ul>
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- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve
  - EGR stepper motor
  - Variable valve timing Bank 2
  - Air control valve control motor
  - Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> </ul> </li> </ul>

<p>2003/03 - 2006/04</p>	<p>1CDFTV</p>	<p>2.0</p>	<p>116</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> </ul>
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					<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Avensis [T25] - Avensis 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda</li> </ul>	

2003/09  
-  
2008/11

2AZFSE

2.4

163

Gear box control  
Transmission control ECT 2.2

factor) 1  
- regulation factor fuel mixture content (lambda  
factor) 2  
- electric fuel pump  
- exhausted gases pressure regul. valve  
- fuel system - bank 1  
- fuel system - bank 2  
- Adjust. revolutions idle  
- Oil  
- Canister valve active carbon filter  
- Direct transmission Converter lockup  
- Tiptronic switch: lower gear engagement  
- Tiptronic switch: upper gear engagement  
- Air mass, actual value  
- exhausted gases recirculation control  
- secondary air switch. valve  
- Solenoid valve: switch. intake manifold 1  
- Solenoid valve: switch. intake manifold 1  
- EGR-magnetic valve step position  
- Ventilation solenoid valve  
- Lambda-control (bank 2, sensor 2)  
- Current gear  
- Lambda controller Lambda probe (B1,S1)  
- Lambda controller Lambda probe (B2,S1)  
- Charging-air pressure magnetic valve  
- Secondary system in limp-home mode  
- Exhaust pipe bypass solenoid valve  
- Overdrive deactivation solen. valve  
- Switch for overdrive deactivation  
- Secondary air system status  
- Idle actuator, position  
- Engine stop request  
- intake manifold pressure  
- Oxygen sensor value (bank 1, sensor 3)  
- Oxygen sensor value (bank 1, sensor 4)  
- Oxygen sensor value (bank 2, sensor 3)  
- Oxygen sensor value (bank 2, sensor 4)  
- Lambda regulation (bank 1, sensor 2)  
- Air compressor switch off  
- Stop light switch 1  
- Ingestion control valve  
- Air relief valve  
- Fuel tank leakage diagnostic pump  
- Air system  
- Catalyst completed  
- Heated catalyst supported  
- Secondary air system supported  
- Oxygen sensor supported  
- Oxygen sensor heating supported  
- Diagnosis mode  
- Oxygen sensor (bank 2, sensor 1) Lambda  
actual value  
- Lambda sensor (B1,S1) Lambda actual value  
- LS (b1, s1) switch time rich to lean  
- LS (b2, s1) switch time rich to lean  
- LS (b1, s1) switch time lean to rich  
- LS (b2, s1) switch time lean to rich  
- Tank ventilation system: vapour pressure in the  
system  
- Throttle valve closing duty cycle  
- LS (b1,s2) switch time rich to lean  
- LS (b2,s2) switch time rich to lean  
- Oxygen sensor monitoring  
- Lean sensor current(bank 1,sensor 1)  
- Lean sensor current(bank 1,sensor 2)  
- Lean sensor mixture correction (B1,S1)  
- Lean sensor mixture correction (B1,S2)  
- Lambda control/Lambda sensor (B1,S2)

- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve



					<ul style="list-style-type: none"> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Avensis [T25] Liftback - Avensis 1.6i 16V Liftback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN

					<ul style="list-style-type: none"> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
<p>2003/01 - 2008/11</p>	<p>3ZZFE</p>	<p>1.6</p>	<p>110</p>		<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> </ul>

- Write vehicle identification number (VIN)
- **Current values**
- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value

Gear box control  
Transmission control ECT 2.2

- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor

					<ul style="list-style-type: none"> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Avensis [T25] Liftback - Avensis 1.8i 16V Liftback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)

- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation



2003/01 - 2008/11	1ZZFE	1.8	129	<ul style="list-style-type: none"> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring

					<ul style="list-style-type: none"> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Avensis [T25] Liftback - Avensis 2.0i 16V Liftback	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> </ul> </li> </ul>

- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean

Engine control  
TCCS II V3

- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve

2003/01 - 2008/11	1AZFSE	2.0	155	<ul style="list-style-type: none"> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC

					<ul style="list-style-type: none"> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Avensis [T25] Liftback - Avensis 2.0 Diesel Turbo Liftback	
Year	Engine	Liters	HP	System	Functions	



**• Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

**• Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

**• Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

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Gear box control  
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode

					<ul style="list-style-type: none"> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Avensis [T25] Liftback - Avensis 2.4i Liftback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda</li> </ul> </li> </ul>	

2003/09  
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2008/11

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Gear box control  
Transmission control ECT 2.2

factor) 2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)

- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump

					<ul style="list-style-type: none"> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Avensis [T25] Wagon - Avensis 1.6i 16V Wagon**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

2003/01 - 2008/11	3ZZFE	1.6	110	<ul style="list-style-type: none"> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b></li> </ul>



- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean

Gear box control  
Transmission control ECT 2.2

- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil

					<ul style="list-style-type: none"> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					
Avensis [T25] Wagon - Avensis 1.8i 16V Wagon					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1

2003/01 - 2008/11	1ZZFE	1.8	129	<ul style="list-style-type: none"> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

					<ul style="list-style-type: none"> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Avensis [T25] Wagon - Avensis 2.0i 16V Wagon	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> </ul> </li> </ul>	



- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring

Engine control  
TCCS II V3

- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve

2003/01 - 2008/11	1AZFSE	2.0	155	<ul style="list-style-type: none"> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> </ul> </li> </ul>
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Gear box control  
Transmission control ECT 2.2

- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN

					<ul style="list-style-type: none"> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Avensis [T25] Wagon - Avensis 2.0i 16V 4WD Wagon	
Year	Engine	Liters	HP	System	Functions
					• <b>Functional tests</b>

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported

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Engine control  
TCCS II V3

- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator

					<ul style="list-style-type: none"> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Avenis [T25] Wagon - Avenis 2.0 Diesel Turbo Wagon	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> </ul> </li> </ul>	



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Gear box control  
Transmission control ECT 2.2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor

2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump

					<ul style="list-style-type: none"> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Avensis [T25] Wagon - Avensis 2.4i Wagon**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control

					<ul style="list-style-type: none"> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Avensis [T27] - Avensis 2.0	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> </ul>

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda

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Engine control  
TCCS II V3

actual value

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve

					<ul style="list-style-type: none"> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Aygo - Aygo 1.0	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> </ul> </li> </ul>	



2005/02 -	1KRFE	1.0	68	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for ovedrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> </ul>
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- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

					<ul style="list-style-type: none"> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA Camry - Camry 2.0i**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> </ul> </li> </ul>

2006/06 -	1AZFE	2.0	147	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> </ul>
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					<ul style="list-style-type: none"> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Camry - Camry 2.2 CNG	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b></li> </ul>	

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean

Engine control  
TCCS II V3

- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil

1999/09 - 2001/08	5SFNE	2.2	120	<ul style="list-style-type: none"> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> </ul> </li> </ul>



Gear box control  
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)

- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

## TOYOTA

## Camry - Camry 2.2

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

1991/09  
-  
2001/08

5SFE

2.2

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- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve
  - EGR stepper motor
  - Variable valve timing Bank 2
  - Air control valve control motor
  - Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda)

- factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)

Gear box control  
Transmission control ECT 2.2

- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve

				<ul style="list-style-type: none"> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> </ul> </li> </ul>



Engine control  
TCCS II V3

- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring

1995/09 - 1998/08	5SFE	2.2	132 - 133	<ul style="list-style-type: none"> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> </ul>

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

Gear box control  
Transmission control ECT 2.2

system

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact

					<ul style="list-style-type: none"> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Camry - Camry 2.0 i Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> </ul> </li> </ul>	

<p>1992/11 - 2001/07</p>	<p>3SFE</p>	<p>2.0</p>	<p>125</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> </ul>
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- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2

					<ul style="list-style-type: none"> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> </ul> </li> </ul>



1997/11  
-  
2001/08

3SFE

2.0

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Gear box control  
Transmission control ECT 2.2

- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply

					<ul style="list-style-type: none"> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Camry - Camry 2.2 i Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> </ul>	

1997/11  
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5SFE

2.2

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Gear box control  
Transmission control ECT 2.2

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control

					<ul style="list-style-type: none"> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Camry [ACV36] - Camry 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC

					<ul style="list-style-type: none"> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
<p>2002/09 - 2006/05</p>	<p>2AZFE</p>	<p>2.4</p>	<p>152</p>		<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> </ul>

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda



Gear box control  
Transmission control ECT 2.2

actual value

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve

					<ul style="list-style-type: none"> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Camry [ACV40] - Camry 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)

- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1

2006/06	2AZFE	2.4	167	<ul style="list-style-type: none"> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

					<ul style="list-style-type: none"> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Camry [MCV20] - Camry Vienta 3.0i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> </ul> </li> </ul>

- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system



1997/07 - 2002/08	1MZFE	3.0	192	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Camry [MCV36] - Camry 3.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)

- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

2002/09 - 2006/06	1MZFE	3.0	192	<ul style="list-style-type: none"> <li>- Ingestion control valve</li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for ovedrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> </ul> </li> </ul>
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Gear box control  
Transmission control ECT 2.2

- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

					<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA						Camry [SXV20] - Camry 2.2i	
Year	Engine	Liters	HP	System	Functions		
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> </ul>		

1998/05 - 2002/02	5SFE	2.2	128	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> </ul>
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- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve

					<ul style="list-style-type: none"> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA						Camry [V1] - Camry 3.0 i Sedan					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> </ul> </li> </ul>					

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Gear box control  
Transmission control ECT 2.2

- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD

					<ul style="list-style-type: none"> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Camry [V2] - Camry 2.2i 16V	
Year	Engine	Liters	HP	System	Functions
					• <b>Functional tests</b>

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported

Engine control  
TCCS II V3

- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator

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- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle

Gear box control  
Transmission control ECT 2.2

- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)



- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation

					<ul style="list-style-type: none"> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Camry [V2] - Camry 3.0i 24V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring

1996/08 - 2001/07	1MZFE	3.0	190	<ul style="list-style-type: none"> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> </ul> </li> </ul>

- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

Gear box control  
Transmission control ECT 2.2

- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve

				<ul style="list-style-type: none"> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU



<p>1996/06 - 2001/09</p>	<p>1MZFE</p>	<p>3.0</p>	<p>192</p>	<ul style="list-style-type: none"> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> <p><b>• Functional tests</b></p> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> </ul>
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- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay

					<ul style="list-style-type: none"> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Camry [V2] - Camry 3.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)

- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve

1997/07 - 2002/08	1MZFE	3.0	192	<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring



					<ul style="list-style-type: none"> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Camry [V2] - Camry 2.2i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> </ul> </li> </ul>

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

Engine control  
TCCS II V3

system

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact

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- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position

Gear box control  
Transmission control ECT 2.2

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring



					<ul style="list-style-type: none"> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Camry [V2] Wagon - Camry Wagon 3.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> </ul>	

Engine control  
TCCS II V3

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control

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- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve

Gear box control  
Transmission control ECT 2.2

- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control

					<ul style="list-style-type: none"> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Camry [V2] Wagon - Camry Wagon 2.2i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> </ul> </li> </ul>	

- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode

1998/05 - 2002/08	5SFE	2.2	129	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> </ul>
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					<ul style="list-style-type: none"> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Camry [V3] - Camry 3.0i 24V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)

- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1

1999/08 - 2006/01	1MZFE	3.0	186	<ul style="list-style-type: none"> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

				<ul style="list-style-type: none"> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> </ul> </li> </ul>

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

Engine control  
TCCS II V3

- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve



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- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve

Gear box control  
Transmission control ECT 2.2

- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS

					<ul style="list-style-type: none"> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Camry [V3] - Camry 2.4i 16V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> </ul> </li> </ul>

- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported

Engine control  
TCCS II V3

- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2

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				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1



					<ul style="list-style-type: none"> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Camry [V3] - Camry 2.0i 16V</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> </ul> </li> </ul>

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Engine control  
TCCS II V3

- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system

					<ul style="list-style-type: none"> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Camry [V3] - Camry 2.4 i Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> </ul> </li> </ul>	

- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich

2003/03 - 2005/12	2AZFE	2.4	152	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Camry [V3] - Camry 3.0 i Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> </ul> </li> </ul>	

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Engine control  
TCCS II V3

- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)

- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor



					<ul style="list-style-type: none"> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Camry [V3] - Camry 2.4</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring

2002/08 - 2009/08	2AZFE	2.4	167	<ul style="list-style-type: none"> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> </ul> </li> </ul>				

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control

				<ul style="list-style-type: none"> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control

					<ul style="list-style-type: none"> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
2002/08	2AZFE	2.4	0		<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> </ul> </li> </ul>



- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

Gear box control  
Transmission control ECT 2.2

- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM

					<ul style="list-style-type: none"> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Camry [V3] - Camry 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal

- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation

2001/08 - 2006/01	2AZFE	2.4	154	<ul style="list-style-type: none"> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status

					<ul style="list-style-type: none"> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Camry [V3] - Camry 2.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> </ul> </li> </ul>	



- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

Engine control  
TCCS II V3

- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve

2002/05 - 2004/11	1AZFE	2.0	146	<ul style="list-style-type: none"> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS

					<ul style="list-style-type: none"> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Camry [V3] - Camry 3.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> </ul> </li> </ul>	

- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported

Engine control  
TCCS II V3

- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2

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<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> </ul> </li> </ul>				



Gear box control  
Transmission control ECT 2.2

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1

				<ul style="list-style-type: none"> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

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- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve
  - EGR stepper motor
  - Variable valve timing Bank 2
  - Air control valve control motor
  - Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda)

Gear box control  
Transmission control ECT 2.2

- factor) 1
  - regulation factor fuel mixture content (lambda
- factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode
  - Oxygen sensor (bank 2, sensor 1) Lambda
- actual value
  - Lambda sensor (B1,S1) Lambda actual value
  - LS (b1, s1) switch time rich to lean
  - LS (b2, s1) switch time rich to lean
  - LS (b1, s1) switch time lean to rich
  - LS (b2, s1) switch time lean to rich
  - Tank ventilation system: vapour pressure in the
- system
  - Throttle valve closing duty cycle
  - LS (b1,s2) switch time rich to lean
  - LS (b2,s2) switch time rich to lean
  - Oxygen sensor monitoring
  - Lean sensor current(bank 1,sensor 1)
  - Lean sensor current(bank 1,sensor 2)
  - Lean sensor mixture correction (B1,S1)
  - Lean sensor mixture correction (B1,S2)
  - Lambda control/Lambda sensor (B1,S2)

- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve

					<ul style="list-style-type: none"> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Camry [V3] - Camry 3.3	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> </ul> </li> </ul>	



Engine control  
TCCS II V3

- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN

					<ul style="list-style-type: none"> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
<p>2003/09 - 2006/08</p>	<p>3MZFE</p>	<p>3.3</p>	<p>213</p>		<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> </ul>

- Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode
  - Oxygen sensor (bank 2, sensor 1) Lambda actual value
  - Lambda sensor (B1,S1) Lambda actual value

Gear box control  
Transmission control ECT 2.2

- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor

					<ul style="list-style-type: none"> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Camry [V3] Wagon - Camry Wagon 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)

- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation

2002/09 - 2006/06	2AZFE	2.4	152	<ul style="list-style-type: none"> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> </ul> </li> </ul>



Gear box control  
Transmission control ECT 2.2

- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring

					<ul style="list-style-type: none"> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Camry [V40] - Camry 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> </ul> </li> </ul>	

- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

Engine control  
TCCS II V3

- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve

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- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)

Gear box control  
Transmission control ECT 2.2

- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU

- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> </ul> </li> </ul>



Engine control  
TCCS II V3

- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

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• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve

Gear box control  
Transmission control ECT 2.2

- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)

- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve

					<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Camry [V4] - Camry 2.4 VVT-i**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> </ul> </li> </ul>

<p>2006/01 - 2011/08</p>	<p>2AZFE</p>	<p>2.4</p>	<p>167</p>	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> </ul>
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					<ul style="list-style-type: none"> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Camry [XV30] - Camry 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> </ul>	

- Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode
  - Oxygen sensor (bank 2, sensor 1) Lambda actual value
  - Lambda sensor (B1,S1) Lambda actual value



Engine control  
TCCS II V3

- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor

2001/09 - 2006/01	2AZFE	2.4	159	<ul style="list-style-type: none"> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)

- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2

					<ul style="list-style-type: none"> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Celica Convertible - Celica 2.2i 16V Convertible**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> </ul> </li> </ul>

<p>1990/09 - 1999/08</p>	<p>5SFE</p>	<p>2.2</p>	<p>136</p>	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> </ul>
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					<ul style="list-style-type: none"> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Celica Coupe - Celica Coupe 1.8i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> </ul> </li> </ul>	

- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean



Engine control  
TCCS II V3

- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve

1999/09 - 2006/04	1ZZFE	1.8	146	<ul style="list-style-type: none"> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC

				<ul style="list-style-type: none"> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> </ul>

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda

Engine control  
TCCS II V3

actual value

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve

1999/08 - 2006/04	2ZZGE	1.8	190	<ul style="list-style-type: none"> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve



- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve

					<ul style="list-style-type: none"> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Celica Liftback - Celica Liftback 1.8i**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring

					<ul style="list-style-type: none"> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
<p>1999/09 - 2005/08</p>	<p>1ZZFE</p>	<p>1.8</p>	<p>0</p>		<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> </ul> </li> </ul>

Gear box control

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

Transmission control ECT 2.2

- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve

					<ul style="list-style-type: none"> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA Celica Liftback - Celica 1.8i 16V Liftback**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2



<p>1999/09 - 2005/08</p>	<p>2ZZGE</p>	<p>1.8</p>	<p>0</p>	<ul style="list-style-type: none"> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> <p><b>• Functional tests</b></p> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> </ul>
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- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported

Gear box control  
Transmission control ECT 2.2

- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2

					<ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Celica Liftback - Celica 2.2i 16V Liftback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> </ul> </li> </ul>	

<p>1995/09 - 1999/08</p>	<p>5SFE</p>	<p>2.2</p>	<p>0</p>	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for ovedrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> </ul>
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- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve

					<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Celica [T23] Coupe - Celica 1.8i 16V Coupe**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring



1999/08 - 2005/09	1ZZFE	1.8	143	<ul style="list-style-type: none"> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> </ul> </li> </ul>

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

Gear box control  
Transmission control ECT 2.2

system

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact

				<ul style="list-style-type: none"> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

<p>2000/08 - 2005/08</p>	<p>2ZZGE</p>	<p>1.8</p>	<p>190</p>	<ul style="list-style-type: none"> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> <p><b>• Functional tests</b></p> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> </ul>
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- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1



					<ul style="list-style-type: none"> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA				Corolla - Corolla 1.8i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor

2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump

2003/01 - 2008/08	1ZZFE	1.8	125	<ul style="list-style-type: none"> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for ovedrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems

			<ul style="list-style-type: none"> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> </ul> </li> </ul>

- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean

Engine control  
TCCS II V3

- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve



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- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear

Gear box control  
Transmission control ECT 2.2

- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC

					<ul style="list-style-type: none"> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Corolla - Corolla 1.8 i	
Year	Engine	Liters	HP	System	Functions

- **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

- **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

- **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1

- regulation factor fuel mixture content (lambda factor) 2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

2004/09  
-  
2006/08

2ZZGE

1.8

192

Engine control  
TCCS II V3

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode

					<ul style="list-style-type: none"> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA				Corolla - Corolla 1.5i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda</li> </ul> </li> </ul>

2000/08 - 2004/12	1NZFE	1.5	109	Gear box control Transmission control ECT 2.2	<p>factor) 2</p> <ul style="list-style-type: none"> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> </ul>
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- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump



					<ul style="list-style-type: none"> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Corolla Altis - New Corolla Altis 1.6i**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> </ul> </li> </ul>

2006/10  
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Engine control  
TCCS II V3

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

					<ul style="list-style-type: none"> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Corolla Limo[E12] - Corolla Limo 1.6i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> </ul> </li> </ul>

- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode

1999/06  
-  
2008/01

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1.6

107

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay

					<ul style="list-style-type: none"> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [E10] Van - Corolla Van 2.2 Diesel 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> </ul> </li> </ul>	

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3CE

2.2

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Gear box control  
Transmission control ECT 2.2

- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)

- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1



					<ul style="list-style-type: none"> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Corolla [E10] Van - Corolla Van 2.2 Diesel**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> </ul> </li> </ul>

<p>1998/04 - 2002/06</p>	<p>3CE</p>	<p>2.2</p>	<p>79</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> </ul>
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					<ul style="list-style-type: none"> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Corolla [E10] Wagon - Corolla Wagon 2.2 Diesel	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> </ul>	

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

1998/04 - 2000/08	3CE	2.2	79	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> </ul> </li> </ul>
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				<ul style="list-style-type: none"> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> </ul> </li> </ul>

1998/04  
-  
2002/06

3CE

2.2

79

Gear box control  
Transmission control ECT 2.2

- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)

- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor



					- Ingestion control valve
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TOYOTA						Corolla [E11, JT] Liftback - Corolla 1.6i 16V Liftback					
Year	Engine	Liters	HP	System	Functions						
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> </ul> </li> </ul>						

Engine control  
TCCS II V3

- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1

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- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve
  - EGR stepper motor
  - Variable valve timing Bank 2
  - Air control valve control motor
  - Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2

Gear box control  
Transmission control ECT 2.2

- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)

- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve

					<ul style="list-style-type: none"> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Corolla [E11, JT] Liftback - Corolla 1.9 Diesel Liftback</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD

					<ul style="list-style-type: none"> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Corolla [E11, JT] Liftback - Corolla 1.4i 16V Liftback	
Year	Engine	Liters	HP	System	Functions
					• <b>Functional tests</b>



- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported

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Gear box control  
Transmission control ECT 2.2

- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator

					<ul style="list-style-type: none"> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [E11, JT] Liftback - Corolla 2.0 Diesel Turbo Liftback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> </ul> </li> </ul>	

2000/08  
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2001/09

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Gear box control  
Transmission control ECT 2.2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor

2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump

					<ul style="list-style-type: none"> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Corolla [E11, SB] Liftback - Corolla 1.6i 16V Liftback</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control

1999/11 - 2001/11	3ZZFE	1.6	110	<ul style="list-style-type: none"> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> </ul> </li> </ul>



- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

Gear box control  
Transmission control ECT 2.2

- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM

					<ul style="list-style-type: none"> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [E11, SB] Liftback - Corolla 1.9 Diesel Liftback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> </ul> </li> </ul>	

1999/12  
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2001/11

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Gear box control  
Transmission control ECT 2.2

- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal

- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation

					<ul style="list-style-type: none"> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA Corolla [E11, SB] Liftback - Corolla 1.4i 16V Liftback**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

					<ul style="list-style-type: none"> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Corolla [E11] - Corolla 1.6i 16V Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> </ul> </li> </ul>	



- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system

Engine control  
TCCS II V3

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve

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- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve

Gear box control  
Transmission control ECT 2.2

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection

- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported

Engine control  
TCCS II V3

- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2

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				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> </ul> </li> </ul>



Gear box control  
Transmission control ECT 2.2

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1

					<ul style="list-style-type: none"> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Corolla [E11] - Corolla 1.8i 16V**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring

1997/09 - 2002/08	1ZZFE	1.8	125	<ul style="list-style-type: none"> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> </ul> </li> </ul>

- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring

Gear box control  
Transmission control ECT 2.2

- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve

					<ul style="list-style-type: none"> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [E11] - Corolla 1.8i 16V Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> </ul> </li> </ul>	



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Engine control  
TCCS II V3

- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode

- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve
  - EGR stepper motor
  - Variable valve timing Bank 2
  - Air control valve control motor
  - Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

					<ul style="list-style-type: none"> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [E11] - Corolla 1.4i 16V Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> </ul>	

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Gear box control  
Transmission control ECT 2.2

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control

					<ul style="list-style-type: none"> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA				Corolla [E11] - Corolla 1.6 i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> </ul> </li> </ul>



<p>1999/09 - 2002/07</p>	<p>4AFE</p>	<p>1.6</p>	<p>107</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> </ul>
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				<ul style="list-style-type: none"> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> </ul>

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda

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Gear box control  
Transmission control ECT 2.2

actual value

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve

				<ul style="list-style-type: none"> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> </ul> </li> </ul>

<p>1999/09 - 2002/09</p>	<p>4AFE</p>	<p>1.6</p>	<p>107</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> </ul>
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- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve

					<ul style="list-style-type: none"> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Corolla [E11] - Corolla 1.8 i**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> </ul> </li> </ul>



1996/10  
-  
2002/07

7AFE

1.8

116

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

				<ul style="list-style-type: none"> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> </ul> </li> </ul>

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

1996/10 - 2002/08	7AFE	1.8	116	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Corolla [E11] - Corolla 2.0 Diesel Turbo**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> </ul> </li> </ul>

2000/08  
-  
2001/09

1CDFTV

2.0

90

Gear box control  
Transmission control ECT 2.2

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve
  - EGR stepper motor
  - Variable valve timing Bank 2
  - Air control valve control motor
  - Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> </ul> </li> </ul>



1996/03 - 2000/11	4AFE	1.6	107 - 110	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> </ul>
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					<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA				Corolla [E11] - Corolla 2.2 Diesel	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda</li> </ul>

<p>1998/04 - 2000/08</p>	<p>3CE</p>	<p>2.2</p>	<p>79</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> </ul>
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- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve

					<ul style="list-style-type: none"> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [E11] - Corolla 2.2 Diesel 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> </ul> </li> </ul>	

1998/04  
-  
2000/08

3CE

2.2

79

Gear box control  
Transmission control ECT 2.2

- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN

					<ul style="list-style-type: none"> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Corolla [E11] Hatchback - Corolla 1.6i 16V Hatchback	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> </ul> </li> </ul>

- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported



Engine control  
TCCS II V3

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1

1999/10 - 2001/07	3ZZFE	1.6	110	<ul style="list-style-type: none"> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)

- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1

					<ul style="list-style-type: none"> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Corolla [E11] Hatchback - Corolla 1.9 Diesel Hatchback</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> </ul> </li> </ul>

<p>2000/01 - 2001/07</p>	<p>1WZ</p>	<p>1.9</p>	<p>69</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> </ul>
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					<ul style="list-style-type: none"> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Corolla [E11] Hatchback - Corolla 1.4i 16V Hatchback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> </ul> </li> </ul>	

- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich



1999/10 - 2001/07	4ZZFE	1.4	97	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					
Corolla [E11] Hatchback - Corolla 2.0 Diesel Turbo Hatchback					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> </ul> </li> </ul>

2000/08 - 2001/07	1CDFTV	2.0	90	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> </ul>
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- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve

					<ul style="list-style-type: none"> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Corolla [E11] Wagon - Corolla 1.6i 16V Wagon</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring

1999/10 - 2001/09	3ZZFE	1.6	110	<ul style="list-style-type: none"> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> </ul> </li> </ul>

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

Gear box control



Transmission control ECT 2.2

- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve

					<ul style="list-style-type: none"> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [E11] Wagon - Corolla 1.8i 16V Wagon 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> </ul> </li> </ul>	

1997/04  
-  
2001/07

7AFE

1.8

110

Gear box control  
Transmission control ECT 2.2

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve
  - EGR stepper motor
  - Variable valve timing Bank 2
  - Air control valve control motor
  - Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> </ul> </li> </ul>

<p>1999/10 - 2001/09</p>	<p>4ZZFE</p>	<p>1.4</p>	<p>97</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> </ul>
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					<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [E11] Wagon - Corolla 1.9 Diesel Wagon 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda</li> </ul>	

<p>2000/01 - 2001/07</p>	<p>1WZ</p>	<p>1.9</p>	<p>69</p>	<p>Gear box control Transmission control ECT 2.2</p>	<p>factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2)</p>
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- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve

					<ul style="list-style-type: none"> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Corolla [E11] Wagon - Corolla 2.0 Diesel Turbo Wagon**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> </ul> </li> </ul>

2000/08  
-  
2001/09

1CDFTV

2.0

90

Gear box control  
Transmission control ECT 2.2

- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN

					<ul style="list-style-type: none"> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Corolla [E11] Wagon - Corolla 1.9 D Wagon	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> </ul> </li> </ul>

- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported

2000/01  
-  
2001/07

1WZ

1.9

69

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1

					<ul style="list-style-type: none"> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [E12, JTD] - Corolla 1.6i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)



- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve

2001/10 - 2006/11	3ZZFE	1.6	110	<ul style="list-style-type: none"> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system

					<ul style="list-style-type: none"> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Corolla [E12, JTD] - Corolla 1.4i 16V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> </ul> </li> </ul>

- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

2001/10 - 2006/11	4ZZFE	1.4	97	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [E12, JTD] - Corolla 1.4 Diesel Turbo	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> </ul> </li> </ul>	

<p>2004/01 - 2006/11</p>	<p>1NDTV</p>	<p>1.4</p>	<p>90</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> </ul>
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- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve

					<ul style="list-style-type: none"> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Corolla [E12, JTD] Wagon - Corolla 1.6i 16V Wagon**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring

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				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> </ul> </li> </ul>

Gear box control

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

## Transmission control ECT 2.2

- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve

					<ul style="list-style-type: none"> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Corolla [E12, JTD] Wagon - Corolla 1.4i 16V Wagon**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2



- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve
  - EGR stepper motor
  - Variable valve timing Bank 2
  - Air control valve control motor
  - Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> </ul> </li> </ul>

2001/10 - 2004/05	1CDFTV	2.0	90 - 116	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> </ul>
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					<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA				Corolla [E12, NMT] - Corolla 1.6i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda</li> </ul>

2002/01 - 2007/02	3ZZFE	1.6	110	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>factor) 1</li> <li>- regulation factor fuel mixture content (lambda</li> <li>factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda</li> <li>actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the</li> <li>system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> </ul>
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- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve

					<ul style="list-style-type: none"> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Corolla [E12, NMT] - Corolla 2.0 Diesel Turbo**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> </ul> </li> </ul>

2002/01  
-  
2007/02

1CDFTV

2.0

90

Gear box control  
Transmission control ECT 2.2

- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN



					<ul style="list-style-type: none"> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Corolla [E12, NMT] Wagon - Corolla 1.6i Wagon	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> </ul> </li> </ul>

- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported

2002/08  
-  
2007/02

3ZZFE

1.6

110

Engine control  
TCCS II V3

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1

					<ul style="list-style-type: none"> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA Corolla [E12, NMT] Wagon - Corolla 1.4 Diesel Turbo Wagon					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> </ul> </li> </ul>

2004/04  
-  
2007/02

1NDTV

1.4

90

Gear box control  
Transmission control ECT 2.2

- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve

					<ul style="list-style-type: none"> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Corolla [E12] - Corolla 1.4 i**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring



2002/09 - 2007/07	4ZZFE	1.4	97	<ul style="list-style-type: none"> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> </ul> </li> </ul>
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- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich

Gear box control  
Transmission control ECT 2.2

- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air

					<ul style="list-style-type: none"> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [E12] - Corolla 1.8 i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve

- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve

2002/09 - 2007/07	1ZZFE	1.8	135	<ul style="list-style-type: none"> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring



					<ul style="list-style-type: none"> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Corolla [E12] - Corolla 1.8i 16V Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> </ul> </li> </ul>	

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

Engine control

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- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve

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- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode

Gear box control  
Transmission control ECT 2.2

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

					<ul style="list-style-type: none"> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Corolla [E12] - Corolla 1.6i 16V Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> </ul> </li> </ul>	

- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported

Engine control  
TCCS II V3

- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2



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- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter

Gear box control  
Transmission control ECT 2.2

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1

					<ul style="list-style-type: none"> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Corolla [E12] - Corolla 1.8</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring

2000/08 - 2008/08	1ZZFE	1.8	125 - 147	<ul style="list-style-type: none"> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> </ul> </li> </ul>

- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring

Gear box control  
Transmission control ECT 2.2

- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve



					<ul style="list-style-type: none"> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [E12] - Corolla 1.5i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> </ul> </li> </ul>	

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Engine control  
TCCS II V3

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve
  - EGR stepper motor
  - Variable valve timing Bank 2
  - Air control valve control motor
  - Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> </ul> </li> </ul>

2002/09  
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2007/07

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Engine control  
TCCS II V3

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

					<ul style="list-style-type: none"> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Corolla [E12] - Corolla 2.0 Diesel Turbo Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> </ul> </li> </ul>	

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Gear box control  
Transmission control ECT 2.2

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control



					<ul style="list-style-type: none"> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [E12] - Corolla 2.2 Diesel	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> </ul> </li> </ul>	

<p>2000/08 - 2004/06</p>	<p>3CE</p>	<p>2.2</p>	<p>79</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> </ul>
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					<ul style="list-style-type: none"> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Corolla [E12] Altis - Corolla Altis 1.6i	
Year	Engine	Liters	HP	System	Functions

**• Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

**• Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

**• Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

Engine control  
TCCS II V3

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode

2001/05 - 2006/10	3ZZFE	1.6	112	<ul style="list-style-type: none"> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status

- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1



				<ul style="list-style-type: none"> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> </ul> </li> </ul>

1999/03  
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2008/01

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Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring

					<ul style="list-style-type: none"> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Corolla [E12] Altis - Corolla Altis 1.8i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> </ul> </li> </ul>	

- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system

1999/03 - 2008/01	1ZZFE	1.8	137	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [E12] Hatchback - Corolla 1.8i 16V Hatchback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> </ul> </li> </ul>	

2001/11 - 2007/12	2ZZGE	1.8	190 - 224	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> </ul>
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- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor



- Ingestion control valve

TOYOTA

Corolla [E12] Hatchback - Corolla 1.4i 16V Hatchback

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"><li>• <b>Functional tests</b><ul style="list-style-type: none"><li>- Diagnosis/electronics test</li><li>- Gear selection</li><li>- Evaporative emission control system leak test</li><li>- Injected quantity</li></ul></li><li>• <b>Adjustments / settings</b><ul style="list-style-type: none"><li>- Adaptive parameters reset</li><li>- Write vehicle identification number (VIN)</li></ul></li><li>• <b>Current values</b><ul style="list-style-type: none"><li>- Short-term AFR correction B2</li><li>- Long-term AFR correction B2</li><li>- Solenoid valve, swirl control</li><li>- Sol. valve, variable intake system</li><li>- Contact idle</li><li>- Regulator idle mode: pulse-duty factor</li><li>- kick-down switch</li><li>- circuit compressor control</li><li>- Winter switch</li><li>- EGR valve - system</li><li>- Oxygen sensor 1</li><li>- Oxygen sensor 2</li><li>- regulation factor fuel mixture content (lambda factor) 1</li><li>- regulation factor fuel mixture content (lambda factor) 2</li><li>- electric fuel pump</li><li>- exhausted gases pressure regul. valve</li><li>- fuel system - bank 1</li><li>- fuel system - bank 2</li><li>- Adjust. revolutions idle</li><li>- Oil</li><li>- Canister valve active carbon filter</li><li>- Direct transmission Converter lockup</li><li>- Tiptronic switch: lower gear engagement</li><li>- Tiptronic switch: upper gear engagement</li><li>- Air mass, actual value</li><li>- exhausted gases recirculation control</li><li>- secondary air switch. valve</li><li>- Solenoid valve: switch. intake manifold 1</li><li>- Solenoid valve: switch. intake manifold 1</li><li>- EGR-magnetic valve step position</li><li>- Ventilation solenoid valve</li><li>- Lambda-control (bank 2, sensor 2)</li><li>- Current gear</li><li>- Lambda controller Lambda probe (B1,S1)</li><li>- Lambda controller Lambda probe (B2,S1)</li><li>- Charging-air pressure magnetic valve</li><li>- Secondary system in limp-home mode</li><li>- Exhaust pipe bypass solenoid valve</li><li>- Overdrive deactivation solen. valve</li><li>- Switch for overdrive deactivation</li><li>- Secondary air system status</li><li>- Idle actuator, position</li><li>- Engine stop request</li><li>- intake manifold pressure</li><li>- Oxygen sensor value (bank 1, sensor 3)</li><li>- Oxygen sensor value (bank 1, sensor 4)</li><li>- Oxygen sensor value (bank 2, sensor 3)</li><li>- Oxygen sensor value (bank 2, sensor 4)</li><li>- Lambda regulation (bank 1, sensor 2)</li><li>- Air compressor switch off</li></ul></li></ul>

Engine control  
TCCS II V3

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

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- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve
  - EGR stepper motor
  - Variable valve timing Bank 2
  - Air control valve control motor
  - Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda)

- factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)

Gear box control  
Transmission control ECT 2.2

- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve

					<ul style="list-style-type: none"> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					
Corolla [E12] Hatchback - Corolla 1.6i 16V Hatchback					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD

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				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b></li> </ul>



- Adaptive parameters reset
- Write vehicle identification number (VIN)
- **Current values**
- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value

Gear box control  
Transmission control ECT 2.2

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system

					<ul style="list-style-type: none"> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA Corolla [E12] Hatchback - Corolla 2.0 Diesel Turbo Hatchback					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)

- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation

					<ul style="list-style-type: none"> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Corolla [E12] Hatchback - Corolla 1.4 Diesel Turbo Hatchback</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems

					<ul style="list-style-type: none"> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Corolla [E12] Runx - Corolla RunX 1.4 i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> </ul> </li> </ul>	



- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

Engine control  
TCCS II V3

- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM

					<ul style="list-style-type: none"> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
<p>2002/09 - 2007/07</p>	<p>4ZZFE</p>	<p>1.4</p>	<p>97</p>		<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status

- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> </ul> </li> </ul>

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Engine control  
TCCS II V3

- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status

					<ul style="list-style-type: none"> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Corolla [E12] Runx - Corolla RunX 1.6 i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> </ul> </li> </ul>



- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

- 2007/07	3ZZFE	1.6	110	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Corolla [E12] Verso - Corolla Verso 1.8i 16V**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

<p>2001/09 - 2004/01</p>	<p>1ZZFE</p>	<p>1.8</p>	<p>135</p>	<ul style="list-style-type: none"> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> </ul> </li> </ul>
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- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported

Gear box control  
Transmission control ECT 2.2

- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2

					<ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [E12] Verso - Corolla Verso 1.6i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> </ul> </li> </ul>	



Engine control  
TCCS II V3

- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve

2001/09 - 2004/01	3ZZFE	1.6	110	<ul style="list-style-type: none"> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system

					<ul style="list-style-type: none"> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Corolla [E12] Verso - Corolla Verso 2.0 Diesel Turbo	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> </ul> </li> </ul>	

- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich

2001/09 - 2004/01	1CDFTV	2.0	90	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [E12] Wagon - Corolla 1.8i 16V Wagon	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> </ul> </li> </ul>	



Engine control  
TCCS II V3

- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)

- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor

2000/08 - 2006/12	1ZZFE	1.8	135	<ul style="list-style-type: none"> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

					<ul style="list-style-type: none"> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [E9] Wagon - Corolla 1.4 16V Wagon	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> </ul>	

Engine control

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

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- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve

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- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode



Gear box control  
Transmission control ECT 2.2

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

					<ul style="list-style-type: none"> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Corolla [R11] Verso - Corolla Verso 1.8i 16V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> </ul> </li> </ul>

- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor / fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode

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Engine control  
TCCS II V3

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay

					<ul style="list-style-type: none"> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Corolla [R11] Verso - Corolla Verso 1.6i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> </ul> </li> </ul>	

2010/02 -	1ZR-FAE	1.6	132	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for ovedrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> </ul>
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- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1

					<ul style="list-style-type: none"> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Corolla [R1] Verso - Corolla Verso 1.6i 16V</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> </ul> </li> </ul>



2004/02  
-  
2009/02

3ZZFE

1.6

110

Engine control  
TCCS II V3

- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring

					<ul style="list-style-type: none"> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Corolla [R1] Verso - Corolla Verso 1.8i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> </ul>	

**• Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

Engine control  
TCCS II V3

- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve

2004/02 - 2009/02	1ZZFE	1.8	129	<ul style="list-style-type: none"> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)

- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

					- Ingestion control valve
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TOYOTA						Crown - Crown 2.5i					
Year	Engine	Liters	HP	System	Functions						
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> </ul> </li> </ul>						



2005/11	5GRFE	2.5	197	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> </ul>
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					<ul style="list-style-type: none"> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Crown - Crown 3.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> </ul> </li> </ul>	

- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean

2005/02 -	3GRFE	3.0	231	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Duet - Duet 1.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> </ul> </li> </ul>	

<p>1998/09 - 2000/05</p>	<p>EJDE</p>	<p>1.0</p>	<p>60</p>	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> </ul>
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- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported



2000/05  
-  
2004/06

EJVE

1.0

64

Engine control  
TCCS II V3

- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator

					<ul style="list-style-type: none"> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Duet - Duet 1.0i 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> </ul> </li> </ul>	

1998/09 - 2000/05	EJDE	1.0	60	Engine control TCCS II V3	<p>factor) 2</p> <ul style="list-style-type: none"> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> </ul>
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- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump

				<ul style="list-style-type: none"> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> </ul> </li> </ul>

2000/05  
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2004/06

EJVE

1.0

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Engine control  
TCCS II V3

- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring

					<ul style="list-style-type: none"> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Echo - Echo 1.5i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b></li> </ul>	

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean



Engine control  
TCCS II V3

- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil

1999/09	1NZFE	1.5	109	<ul style="list-style-type: none"> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
-				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)

- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> </ul> </li> </ul>
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Engine control  
TCCS II V3

- Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode
  - Oxygen sensor (bank 2, sensor 1) Lambda actual value
  - Lambda sensor (B1,S1) Lambda actual value
  - LS (b1, s1) switch time rich to lean
  - LS (b2, s1) switch time rich to lean
  - LS (b1, s1) switch time lean to rich
  - LS (b2, s1) switch time lean to rich
  - Tank ventilation system: vapour pressure in the system
  - Throttle valve closing duty cycle
  - LS (b1,s2) switch time rich to lean
  - LS (b2,s2) switch time rich to lean
  - Oxygen sensor monitoring
  - Lean sensor current(bank 1,sensor 1)
  - Lean sensor current(bank 1,sensor 2)
  - Lean sensor mixture correction (B1,S1)
  - Lean sensor mixture correction (B1,S2)
  - Lambda control/Lambda sensor (B1,S3)
  - Lambda control/Lambda sensor (B1,S4)
  - Lambda control, oxygen sensor (bank 2, sensor 2)
  - Lambda control/Lambda sensor (B2,S3)
  - Lambda control/Lambda sensor (B2,S4)
  - Air conditioner monitoring status
  - Oxygen sensor status (B1, S2)
  - Oxygen sensor status (bank 2, sensor 2)
  - Fuel shutoff status
  - Electrical power steering, signal
  - Air bypass solenoid valve
  - Oxygen sensor voltage (bank 1-sensor 3)
  - Oxygen sensor voltage (bank 1, sensor 4)
  - Oxygen sensor voltage (bank 2, sensor 3)
  - Oxygen sensor voltage (bank 2, sensor 4)
  - Evap. emissions control regulating valve status
  - Sports mode
  - Fault codes count
  - Throttle valve position 2
  - Solenoid switch valve DSU
  - Solenoid switch valve SLC
  - Solenoid shift valve SLD
  - Switch solenoid valve SLN
  - Solenoid shift valve SLS
  - Switch solenoid valve SLU
  - Catalytic converter control
  - Evapor. emission control monitoring
  - Secondary air system monitoring
  - Air conditioner monitoring
  - Lambda sensor heating circuit monitoring
  - Monitoring of sub-systems
  - Monitoring of fuel system
  - Misfire detection monitoring
  - EGR system monitoring
  - Evapor. emission control monitoring
  - Heated catalyt. converter monitoring
  - DK control motor actuation current 1
  - Gear down
  - System power mode status
  - Engine speed on misfiring
  - Engine load on misfiring
  - Throttle valve actuator power supply
  - Engine run time
- **Actuators**

2003/06	1NZFE	1.5	106	<ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)



- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1

				<ul style="list-style-type: none"> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring

2000/08 - 2002/12	1NZFE	1.5	109	<ul style="list-style-type: none"> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> </ul> </li> </ul>				

- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring

Gear box control  
Transmission control ECT 2.2

- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve

				<ul style="list-style-type: none"> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS



					<ul style="list-style-type: none"> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
1999/09 - 2005/08	1NZFE	1.5	109		<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> </ul>

- Write vehicle identification number (VIN)
- **Current values**
- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value

Gear box control  
Transmission control ECT 2.2

- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor

					<ul style="list-style-type: none"> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Harrier - Harrier 3.3i 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> </ul> </li> </ul>	

2003/02

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Engine control  
TCCS II V3

- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)

- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1

					<ul style="list-style-type: none"> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Hiace - Hiace 2.7</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> </ul> </li> </ul>

1998/04  
-  
2009/05

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2.7

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Engine control  
TCCS II V3

- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system



					<ul style="list-style-type: none"> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Hiace - Hiace 2.7 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> </ul> </li> </ul>	

- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich

1998/04 - 2009/05	3RZFE	2.7	143	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Highlander - Highlander 2.4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)

- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor

2000/09 - 2007/08	2AZFE	2.4	157 - 162	<ul style="list-style-type: none"> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring



					<ul style="list-style-type: none"> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Highlander - Highlander 2.4 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> </ul>	

Engine control

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

TCCS II V3

- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve

2000/09  
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2007/08

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- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode

Gear box control  
Transmission control ECT 2.2

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

					<ul style="list-style-type: none"> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Highlander - Highlander 3.0	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> </ul> </li> </ul>

- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode

Engine control  
TCCS II V3

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay



2000/09 - 2003/08	1MZFE	3.0	223	<ul style="list-style-type: none"> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal

- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation

					<ul style="list-style-type: none"> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Highlander - Highlander 3.0 4x4</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring

2000/09 - 2003/08	1MZFE	3.0	223		<ul style="list-style-type: none"> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> </ul> </li> </ul>

- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring

Gear box control  
Transmission control ECT 2.2

- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve



					<ul style="list-style-type: none"> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Highlander - Highlander 3.3 4x4</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

<p>2003/09 - 2007/08</p>	<p>3MZFE</p>	<p>3.3</p>	<p>218 - 233</p>	<ul style="list-style-type: none"> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> </ul> </li> </ul>
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- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1

					<ul style="list-style-type: none"> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Highlander - Highlander 3.3	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor

2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump



2003/09 - 2007/08	3MZFE	3.3	233	<ul style="list-style-type: none"> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for ovedrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems

					<ul style="list-style-type: none"> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Highlander - Highlander 3.5 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> </ul> </li> </ul>	

- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

2007/09 -	2GRFE	3.5	274	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Highlander - Highlander 3.5	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> </ul> </li> </ul>	

2007/09 -	2GRFE	3.5	274	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> </ul>
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- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve



					<ul style="list-style-type: none"> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Hilux - Hilux 3.0 TD 4x4</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> </ul> </li> </ul>

2002/03 - 2005/05	1KZTE	3.0	116	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> </ul>
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					<ul style="list-style-type: none"> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Hilux - Hilux 3.0 Diesel Turbo 4x4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> </ul> </li> </ul>

- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

1999/12 -	1KZTE	3.0	116	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Hilux - Hilux 2.7i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> </ul> </li> </ul>	

1997/10  
-  
2005/02

3RZFE

2.7

147

Gear box control  
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)

- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve



Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> </ul> </li> </ul>

2002/10  
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5VZFE

3.4

169

Gear box control  
Transmission control ECT 2.2

- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status

					<ul style="list-style-type: none"> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Hilux - Hilux 2.4 Diesel Turbo 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> </ul> </li> </ul>	

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

-	2LTE	2.4	97	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> </ul>
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					<ul style="list-style-type: none"> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA				Hilux - Hilux 2.0i 4WD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> </ul> </li> </ul>

1994/08  
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1997/08

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Gear box control  
Transmission control ECT 2.2

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve



Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> </ul> </li> </ul>

2000/01	2RZFE	2.4	140	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> </ul>
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					<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Hilux Pickup - Hilux 2.4i Pickup 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda</li> </ul>	

<p>1988/09 - 1997/08</p>	<p>22RE</p>	<p>2.4</p>	<p>114</p>	<p>Gear box control Transmission control ECT 2.2</p>	<p>factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2)</p>
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- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve

					<ul style="list-style-type: none"> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Hilux Pickup - Hilux 2.4i Pickup 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> </ul> </li> </ul>	

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Gear box control  
Transmission control ECT 2.2

- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN

- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset



- Write vehicle identification number (VIN)
- **Current values**
- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value

1997/11 - 2001/08	2RZFE	2.4	108	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Hilux Pickup - Hilux 2.4i Pickup	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> </ul> </li> </ul>	

<p>1997/08 - 1999/08</p>	<p>2RZFE EFI</p>	<p>2.4</p>	<p>141</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> </ul>
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- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation

					<ul style="list-style-type: none"> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Hilux Pickup - Hilux 2.5 Diesel Turbo Pickup 4x4</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> </ul> </li> </ul>

<p>2001/08 - 2005/08</p>	<p>2KDFTV</p>	<p>2.5</p>	<p>88</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> </ul>
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					<ul style="list-style-type: none"> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Hilux Surf - Hilux Surf 3.0 Diesel Turbo 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> </ul> </li> </ul>	



- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

1993/08 - 1995/11	1KZTE	3.0	131	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> </ul> </li> </ul>
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			<ul style="list-style-type: none"> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status

- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

**• Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

**• Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

**• Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

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Gear box control  
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode

			<ul style="list-style-type: none"> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> </ul> </li> </ul>



<p>2000/06 - 2002/11</p>	<p>1KDFTV</p>	<p>3.0</p>	<p>170</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for ovedrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> </ul>
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- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

				<ul style="list-style-type: none"> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring

					<ul style="list-style-type: none"> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Hilux Surf - Hilux Surf 2.4 Diesel Turbo 4WD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> </ul> </li> </ul>

- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system

1990/08 - 1993/08	2LTE	2.4	97	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Hilux Tiger - Hilux Tiger D4D 2.5 Diesel Turbo 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> </ul> </li> </ul>	



2001/11 -	2KDFTV	2.5	103	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> </ul>
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- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

- Ingestion control valve

TOYOTA

Hilux Wagon - Hilux 3.0i Wagon

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"><li>• <b>Functional tests</b><ul style="list-style-type: none"><li>- Diagnosis/electronics test</li><li>- Gear selection</li><li>- Evaporative emission control system leak test</li><li>- Injected quantity</li></ul></li><li>• <b>Adjustments / settings</b><ul style="list-style-type: none"><li>- Adaptive parameters reset</li><li>- Write vehicle identification number (VIN)</li></ul></li><li>• <b>Current values</b><ul style="list-style-type: none"><li>- Short-term AFR correction B2</li><li>- Long-term AFR correction B2</li><li>- Solenoid valve, swirl control</li><li>- Sol. valve, variable intake system</li><li>- Contact idle</li><li>- Regulator idle mode: pulse-duty factor</li><li>- kick-down switch</li><li>- circuit compressor control</li><li>- Winter switch</li><li>- EGR valve - system</li><li>- Oxygen sensor 1</li><li>- Oxygen sensor 2</li><li>- regulation factor fuel mixture content (lambda factor) 1</li><li>- regulation factor fuel mixture content (lambda factor) 2</li><li>- electric fuel pump</li><li>- exhausted gases pressure regul. valve</li><li>- fuel system - bank 1</li><li>- fuel system - bank 2</li><li>- Adjust. revolutions idle</li><li>- Oil</li><li>- Canister valve active carbon filter</li><li>- Direct transmission Converter lockup</li><li>- Tiptronic switch: lower gear engagement</li><li>- Tiptronic switch: upper gear engagement</li><li>- Air mass, actual value</li><li>- exhausted gases recirculation control</li><li>- secondary air switch. valve</li><li>- Solenoid valve: switch. intake manifold 1</li><li>- Solenoid valve: switch. intake manifold 1</li><li>- EGR-magnetic valve step position</li><li>- Ventilation solenoid valve</li><li>- Lambda-control (bank 2, sensor 2)</li><li>- Current gear</li><li>- Lambda controller Lambda probe (B1,S1)</li><li>- Lambda controller Lambda probe (B2,S1)</li><li>- Charging-air pressure magnetic valve</li><li>- Secondary system in limp-home mode</li><li>- Exhaust pipe bypass solenoid valve</li><li>- Overdrive deactivation solen. valve</li><li>- Switch for overdrive deactivation</li><li>- Secondary air system status</li><li>- Idle actuator, position</li><li>- Engine stop request</li><li>- intake manifold pressure</li><li>- Oxygen sensor value (bank 1, sensor 3)</li><li>- Oxygen sensor value (bank 1, sensor 4)</li><li>- Oxygen sensor value (bank 2, sensor 3)</li><li>- Oxygen sensor value (bank 2, sensor 4)</li><li>- Lambda regulation (bank 1, sensor 2)</li><li>- Air compressor switch off</li></ul></li></ul>

1989/08  
-  
1995/11

3VZE

3.0

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Gear box control  
Transmission control ECT 2.2

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

					<ul style="list-style-type: none"> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Hilux [N25] - Hilux 2.5 D-4D 4x4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> </ul> </li> </ul>

- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring

2011/07 -	2KDFTV	2.5	102	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> </ul>
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					<ul style="list-style-type: none"> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA				Hilux [N26] - Hilux 3.0 D-4D 4x4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> </ul> </li> </ul>



2011/07

1KDFTV

3.0

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Gear box control  
Transmission control ECT 2.2

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

					<ul style="list-style-type: none"> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA Kluger - Kluger 3.3i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> </ul>

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control

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- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve



Gear box control  
Transmission control ECT 2.2

- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control

					<ul style="list-style-type: none"> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Land Cruiser - Land Cruiser 4.5i 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> </ul> </li> </ul>	

- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor / fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode

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Engine control  
TCCS II V3

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay

					<ul style="list-style-type: none"> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Land Cruiser - Land Cruiser 4.7i 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)

- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1

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- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)



Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

					<ul style="list-style-type: none"> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Land Cruiser - Land Cruiser 4.5 4x4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> </ul> </li> </ul>

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

1999/10 - 2007/02	1FZFE	4.5	224	Gear box control Transmission control ECT 2.2	<p>system</p> <ul style="list-style-type: none"> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> </ul>
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					<ul style="list-style-type: none"> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA Land Cruiser Prado [J12] - Land Cruiser Prado 3.0 Diesel Turbo 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> </ul> </li> </ul>

<p>2002/11 - 2007/07</p>	<p>1KDFTV</p>	<p>3.0</p>	<p>170</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> </ul>
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- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2

					<ul style="list-style-type: none"> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> </ul> </li> </ul>



2009/02  
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Gear box control  
Transmission control ECT 2.2

- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply

					<ul style="list-style-type: none"> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Land Cruiser Prado [J9] - Land Cruiser Prado 3.4i 24V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> </ul>	

1996/04 -	5VZFE	3.4	178 -	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> </ul>
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- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control

					<ul style="list-style-type: none"> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA Land Cruiser Prado [J9] - Land Cruiser Prado 2.7i 16V 4x4**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC

					<ul style="list-style-type: none"> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Land Cruiser Prado [J9] - Land Cruiser Prado 3.0 Diesel Turbo 4x4	
Year	Engine	Liters	HP	System	Functions	

**• Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

**• Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

**• Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported



2000/03  
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2002/09

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Gear box control  
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode

			<ul style="list-style-type: none"> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> </ul> </li> </ul>

<p>1996/04 - 2000/08</p>	<p>1KZTE</p>	<p>3.0</p>	<p>140 - 146</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for ovedrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> </ul>
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- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

				<ul style="list-style-type: none"> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> </ul> </li> </ul>

<p>2000/08 - 2002/11</p>	<p>1KDFTV</p>	<p>3.0</p>	<p>170</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> </ul>
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					<ul style="list-style-type: none"> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Land Cruiser [J10] - Land Cruiser 4.2 Diesel Turbo 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> </ul> </li> </ul>	

- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system



1998/01 - 2004/06	1HDFTE	4.2	196 - 205	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					
Land Cruiser [J10] - Land Cruiser 4.5i 24V					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> </ul> </li> </ul>

1998/01 -	1FZFE	4.5	224	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> </ul>
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- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

- Ingestion control valve

TOYOTA

Land Cruiser [J20] - Land Cruiser 4.6i 4x4

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"><li>• <b>Functional tests</b><ul style="list-style-type: none"><li>- Diagnosis/electronics test</li><li>- Gear selection</li><li>- Evaporative emission control system leak test</li><li>- Injected quantity</li></ul></li><li>• <b>Adjustments / settings</b><ul style="list-style-type: none"><li>- Adaptive parameters reset</li><li>- Write vehicle identification number (VIN)</li></ul></li><li>• <b>Current values</b><ul style="list-style-type: none"><li>- Short-term AFR correction B2</li><li>- Long-term AFR correction B2</li><li>- Solenoid valve, swirl control</li><li>- Sol. valve, variable intake system</li><li>- Contact idle</li><li>- Regulator idle mode: pulse-duty factor</li><li>- kick-down switch</li><li>- circuit compressor control</li><li>- Winter switch</li><li>- EGR valve - system</li><li>- Oxygen sensor 1</li><li>- Oxygen sensor 2</li><li>- regulation factor fuel mixture content (lambda factor) 1</li><li>- regulation factor fuel mixture content (lambda factor) 2</li><li>- electric fuel pump</li><li>- exhausted gases pressure regul. valve</li><li>- fuel system - bank 1</li><li>- fuel system - bank 2</li><li>- Adjust. revolutions idle</li><li>- Oil</li><li>- Canister valve active carbon filter</li><li>- Direct transmission Converter lockup</li><li>- Tiptronic switch: lower gear engagement</li><li>- Tiptronic switch: upper gear engagement</li><li>- Air mass, actual value</li><li>- exhausted gases recirculation control</li><li>- secondary air switch. valve</li><li>- Solenoid valve: switch. intake manifold 1</li><li>- Solenoid valve: switch. intake manifold 1</li><li>- EGR-magnetic valve step position</li><li>- Ventilation solenoid valve</li><li>- Lambda-control (bank 2, sensor 2)</li><li>- Current gear</li><li>- Lambda controller Lambda probe (B1,S1)</li><li>- Lambda controller Lambda probe (B2,S1)</li><li>- Charging-air pressure magnetic valve</li><li>- Secondary system in limp-home mode</li><li>- Exhaust pipe bypass solenoid valve</li><li>- Overdrive deactivation solen. valve</li><li>- Switch for overdrive deactivation</li><li>- Secondary air system status</li><li>- Idle actuator, position</li><li>- Engine stop request</li><li>- intake manifold pressure</li><li>- Oxygen sensor value (bank 1, sensor 3)</li><li>- Oxygen sensor value (bank 1, sensor 4)</li><li>- Oxygen sensor value (bank 2, sensor 3)</li><li>- Oxygen sensor value (bank 2, sensor 4)</li><li>- Lambda regulation (bank 1, sensor 2)</li><li>- Air compressor switch off</li></ul></li></ul>

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Gear box control  
Transmission control ECT 2.2

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

					<ul style="list-style-type: none"> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Land Cruiser [J20] - Land Cruiser 4.5 D-4D 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> </ul> </li> </ul>	

- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring



2010/04 -	1VDFTV	4.5	235	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Land Cruiser [J6,J7,J10] - Land Cruiser 4.7i 32V 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

<p>1998/01 - 2008/07</p>	<p>2UZFE</p>	<p>4.7</p>	<p>235</p>	<ul style="list-style-type: none"> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> </ul> </li> </ul>
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- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1

					<ul style="list-style-type: none"> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					
Land Cruiser [J6,J7,J10] - Land Cruiser 4.7i 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor



2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump

1998/01 - 2007/08	2UZFE	4.7	235	<ul style="list-style-type: none"> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for ovedrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems

					<ul style="list-style-type: none"> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Land Cruiser [J6,J7,J10] - Land Cruiser 4.5 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> </ul> </li> </ul>	

- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

Engine control  
TCCS II V3

- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM

					<ul style="list-style-type: none"> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
<p>1998/03 - 2002/09</p>	<p>1FZFE</p>	<p>4.5</p>	<p>224</p>		<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status



- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

**• Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

**• Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

**• Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

1998/03  
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4.5

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Gear box control  
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode

			<ul style="list-style-type: none"> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> </ul> </li> </ul>

1992/11 - 1999/11	1FZFE	4.5	212	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for ovedrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> </ul>
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- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

					<ul style="list-style-type: none"> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** Land Cruiser [J6,J7,J10] - Land Cruiser 4.0

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> </ul> </li> </ul>

<p>1987/09 - 1990/01</p>	<p>3FE</p>	<p>4.0</p>	<p>152</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> </ul>
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					<ul style="list-style-type: none"> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA Land Cruiser [J6,J7,J10] - Land Cruiser 4.2 Diesel Turbo 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> </ul>

**• Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

1998/01 - 2008/07	1HDFTE	4.2	204	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> </ul> </li> </ul>
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				<ul style="list-style-type: none"> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> </ul> </li> </ul>

2001/06	1HDFTE	4.2	205	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> </ul>
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- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

- Ingestion control valve

**TOYOTA**

**Land Cruiser [J7] - Land Cruiser 4.5i 24V**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> </ul> </li> </ul>

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Engine control  
TCCS II V3

- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1



					<ul style="list-style-type: none"> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Land Cruiser [J7] - Land Cruiser 4.2 Diesel 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> </ul> </li> </ul>	

- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean

1999/08 - 2004/06	1HZ	4.2	131	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> </ul>
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					<ul style="list-style-type: none"> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Land Cruiser [J8] - Land Cruiser 4.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> </ul> </li> </ul>	

<p>1990/01 - 1992/08</p>	<p>3FE</p>	<p>4.0</p>	<p>155 - 156</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> </ul>
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- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> </ul> </li> </ul>

1992/08  
-  
1998/01

1FZFE

4.5

205  
-  
215

Gear box control  
Transmission control ECT 2.2

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring



					<ul style="list-style-type: none"> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Land Cruiser [J8] - Land Cruiser 4.0i 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> </ul>	

<p>1990/01 - 1992/08</p>	<p>3FE</p>	<p>4.0</p>	<p>155</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> </ul>
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- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control

					<ul style="list-style-type: none"> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** Land Cruiser [J9] - Land Cruiser 3.4i 24V

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> </ul> </li> </ul>

<p>1996/04 - 2006/12</p>	<p>5VZFE</p>	<p>3.4</p>	<p>178 - 185</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> </ul>
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					<ul style="list-style-type: none"> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Land Cruiser [J9] - Land Cruiser 3.0 Diesel Turbo Intercooler	
Year	Engine	Liters	HP	System	Functions	

**• Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

**• Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

**• Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

1996/04  
-  
2002/09

1KZTE

3.0

125

Gear box control  
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode



					<ul style="list-style-type: none"> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Land Cruiser [J9] - Land Cruiser 3.0 Diesel Turbo	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda</li> </ul> </li> </ul>	

1996/04 - 2006/12	1KZTE	3.0	120 - 125	Gear box control Transmission control ECT 2.2	<p>factor) 2</p> <ul style="list-style-type: none"> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> </ul> <p>actual value</p> <ul style="list-style-type: none"> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> </ul>
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- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump

				<ul style="list-style-type: none"> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> </ul> </li> </ul>

2000/08  
-  
2002/09

1KDFTV

3.0

163

Gear box control  
Transmission control ECT 2.2

- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring

					<ul style="list-style-type: none"> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					MR2 [W3] Cabrio - MR2 1.8 16V Cabrio	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> </ul>	

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

Engine control  
TCCS II V3

- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve



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- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control

Gear box control  
Transmission control ECT 2.2

- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)

- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

- Ingestion control valve

TOYOTA

Matrix - Matrix 1.8

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"><li>• <b>Functional tests</b><ul style="list-style-type: none"><li>- Diagnosis/electronics test</li><li>- Gear selection</li><li>- Evaporative emission control system leak test</li><li>- Injected quantity</li></ul></li><li>• <b>Adjustments / settings</b><ul style="list-style-type: none"><li>- Adaptive parameters reset</li><li>- Write vehicle identification number (VIN)</li></ul></li><li>• <b>Current values</b><ul style="list-style-type: none"><li>- Short-term AFR correction B2</li><li>- Long-term AFR correction B2</li><li>- Solenoid valve, swirl control</li><li>- Sol. valve, variable intake system</li><li>- Contact idle</li><li>- Regulator idle mode: pulse-duty factor</li><li>- kick-down switch</li><li>- circuit compressor control</li><li>- Winter switch</li><li>- EGR valve - system</li><li>- Oxygen sensor 1</li><li>- Oxygen sensor 2</li><li>- regulation factor fuel mixture content (lambda factor) 1</li><li>- regulation factor fuel mixture content (lambda factor) 2</li><li>- electric fuel pump</li><li>- exhausted gases pressure regul. valve</li><li>- fuel system - bank 1</li><li>- fuel system - bank 2</li><li>- Adjust. revolutions idle</li><li>- Oil</li><li>- Canister valve active carbon filter</li><li>- Direct transmission Converter lockup</li><li>- Tiptronic switch: lower gear engagement</li><li>- Tiptronic switch: upper gear engagement</li><li>- Air mass, actual value</li><li>- exhausted gases recirculation control</li><li>- secondary air switch. valve</li><li>- Solenoid valve: switch. intake manifold 1</li><li>- Solenoid valve: switch. intake manifold 1</li><li>- EGR-magnetic valve step position</li><li>- Ventilation solenoid valve</li><li>- Lambda-control (bank 2, sensor 2)</li><li>- Current gear</li><li>- Lambda controller Lambda probe (B1,S1)</li><li>- Lambda controller Lambda probe (B2,S1)</li><li>- Charging-air pressure magnetic valve</li><li>- Secondary system in limp-home mode</li><li>- Exhaust pipe bypass solenoid valve</li><li>- Overdrive deactivation solen. valve</li><li>- Switch for overdrive deactivation</li><li>- Secondary air system status</li><li>- Idle actuator, position</li><li>- Engine stop request</li><li>- intake manifold pressure</li><li>- Oxygen sensor value (bank 1, sensor 3)</li><li>- Oxygen sensor value (bank 1, sensor 4)</li><li>- Oxygen sensor value (bank 2, sensor 3)</li><li>- Oxygen sensor value (bank 2, sensor 4)</li><li>- Lambda regulation (bank 1, sensor 2)</li><li>- Air compressor switch off</li></ul></li></ul>

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Engine control  
TCCS II V3

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

				<ul style="list-style-type: none"> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda)</li> </ul> </li> </ul>

<p>2002/09 - 2008/08</p>	<p>1ZZFE</p>	<p>1.8</p>	<p>120</p>	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> <li>factor) 1</li> <li>- regulation factor fuel mixture content (lambda</li> <li>factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda</li> <li>actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the</li> <li>system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> </ul>
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- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve



					<ul style="list-style-type: none"> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					
Matrix - Matrix 1.8 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> </ul> </li> </ul>

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Engine control  
TCCS II V3

- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD

					<ul style="list-style-type: none"> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Picnic - Picnic 2.0i	
Year	Engine	Liters	HP	System	Functions
					• <b>Functional tests</b>

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported

Engine control  
TCCS II V3

- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator

2003/08	1AZFE	2.0	150	<ul style="list-style-type: none"> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)

- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation



				<ul style="list-style-type: none"> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring

1997/04 - 2003/07	1AZFE	2.0	150	<ul style="list-style-type: none"> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> </ul> </li> </ul>

Gear box control

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

Transmission control ECT 2.2

- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve

					<ul style="list-style-type: none"> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA Picnic - Picnic 2.0i 16V**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> </ul> </li> </ul>

<p>1996/09 - 2001/05</p>	<p>3SFE</p>	<p>2.0</p>	<p>133</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> </ul>
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					<ul style="list-style-type: none"> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA				Picnic - Picnic 2.2 Diesel Turbo	
Year	Engine	Liters	HP	System	Functions



**• Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

**• Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

**• Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

1997/09  
-  
2001/05

3CTE

2.2

90

Gear box control  
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode

					<ul style="list-style-type: none"> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Previa - Previa 2.4i 16V 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

factor) 2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)

- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump

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- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position

Gear box control  
Transmission control ECT 2.2

- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring

				<ul style="list-style-type: none"> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> </ul> </li> </ul>



- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

Engine control  
TCCS II V3

- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve

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- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)

Gear box control  
Transmission control ECT 2.2

- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU

- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test

- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode

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Gear box control  
Transmission control ECT 2.2

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay

					<ul style="list-style-type: none"> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					
Previa - Previa 2.4i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> </ul> </li> </ul>



Engine control  
TCCS II V3

- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)

- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1

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				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

					<ul style="list-style-type: none"> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Previa - Previa 2.4i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> </ul> </li> </ul>	

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

1990/09 - 1999/12	2TZFE	2.4	132	Gear box control Transmission control ECT 2.2	<p>system</p> <ul style="list-style-type: none"> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> </ul>
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				<ul style="list-style-type: none"> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> </ul> </li> </ul>



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Gear box control  
Transmission control ECT 2.2

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test

- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported

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Gear box control  
Transmission control ECT 2.2

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1

					<ul style="list-style-type: none"> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Previa - Previa 2.0 Diesel Turbo	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> </ul> </li> </ul>	

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Gear box control  
Transmission control ECT 2.2

- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve

					<ul style="list-style-type: none"> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Prius - Prius 1.5i</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> </ul> </li> </ul>



Engine control  
TCCS II V3

- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring

1997/12 - 2003/09	1NZFXE	1.5	58 - 72	<ul style="list-style-type: none"> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> </ul>
				<ul style="list-style-type: none"> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> </ul> </li> </ul>

- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich

Gear box control  
Transmission control ECT 2.2

- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air

				<ul style="list-style-type: none"> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> </ul> </li> </ul>

2003/09

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Engine control  
TCCS II V3

- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode

- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> </ul> </li> </ul>



Engine control  
TCCS II V3

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

2000/09 - 2003/08	1NZFXE	1.5	72	<ul style="list-style-type: none"> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> </ul>

Gear box control  
Transmission control ECT 2.2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor

2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump

					<ul style="list-style-type: none"> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Prius [W20] - Prius 1.5i</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> </ul> </li> </ul>

2003/09  
-  
2009/03

1NZFXE

1.5

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Engine control  
TCCS II V3

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

					<ul style="list-style-type: none"> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					RAV4 - RAV4 2.0i 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> </ul> </li> </ul>	

- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor / fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode



2000/05  
-  
2005/11

1AZFSE

2.0

152  
-  
155

Engine control  
TCCS II V3

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay

					<ul style="list-style-type: none"> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					RAV4 - RAV4 1.8i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> </ul> </li> </ul>	

2000/05 - 2005/11	1ZZFE	1.8	125	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for ovedrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> </ul>
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- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1

					<ul style="list-style-type: none"> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>RAV4 - RAV4 2.4i 4x4</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring

2003/07 - 2006/01	2AZFE	2.4	163	<ul style="list-style-type: none"> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> </ul> </li> </ul>

- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system



Gear box control  
Transmission control ECT 2.2

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve

					<ul style="list-style-type: none"> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					RAV4 - RAV4 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> </ul> </li> </ul>	

2005/11

2AZFE

2.4

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Engine control  
TCCS II V3

- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)

- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2

					<ul style="list-style-type: none"> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA				RAV4 - RAV4 2.4i 4WD	
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1

2005/11 -	2AZFE	2.4	170	<ul style="list-style-type: none"> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> </ul> </li> </ul>				

Gear box control  
Transmission control ECT 2.2

- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)



- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve

					<ul style="list-style-type: none"> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					RAV4 - RAV4 2.0i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> </ul> </li> </ul>	

<p>1995/09 - 1998/08</p>	<p>3SFE</p>	<p>2.0</p>	<p>120</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> </ul>
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					<ul style="list-style-type: none"> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				RAV4 [A1] - RAV4 2.0i 16V 4x4	
Year	Engine	Liters	HP	System	Functions

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

Engine control  
TCCS II V3

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode

1995/11  
-  
2000/08

3SFE

2.0

128

- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2

Gear box control  
Transmission control ECT 2.2

- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status



- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

				<ul style="list-style-type: none"> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> </ul> </li> </ul>

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Engine control  
TCCS II V3

- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring

				<ul style="list-style-type: none"> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> </ul> </li> </ul>

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

- 2000/08	3SGE	2.0	165	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> </ul> </li> </ul>
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				<ul style="list-style-type: none"> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU



				<ul style="list-style-type: none"> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b></li> </ul>

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean

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Gear box control  
Transmission control ECT 2.2

- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil

					<ul style="list-style-type: none"> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					
RAV4 [A1] Cabrio - RAV4 2.0i 16V Cabrio 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal

- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation

				<ul style="list-style-type: none"> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status



					<ul style="list-style-type: none"> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				RAV4 [A2] - RAV4 1.8i 16V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> </ul> </li> </ul>

- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring

Engine control  
TCCS II V3

- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve

2000/05 - 2005/11	1ZZFE	1.8	140	<ul style="list-style-type: none"> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN

					<ul style="list-style-type: none"> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				RAV4 [A2] - RAV4 2.0 VVT-i 4x4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> </ul> </li> </ul>

- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported

Engine control  
TCCS II V3

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1



2000/05 - 2005/11	1AZFE	2.0	150	<ul style="list-style-type: none"> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)

- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1

					<ul style="list-style-type: none"> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>RAV4 [A2] - RAV4 2.4i</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems

2003/09 - 2005/11	2AZFE	2.4	170	<ul style="list-style-type: none"> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> </ul> </li> </ul>

- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean

Gear box control  
Transmission control ECT 2.2

- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve



					<ul style="list-style-type: none"> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					RAV4 [A2] - RAV4 2.4i 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status

- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

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• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

Gear box control  
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode

					<ul style="list-style-type: none"> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					RAV4 [A2] - RAV4 2.0 VVT-i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)

- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control



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- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status

Gear box control  
Transmission control ECT 2.2

- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring

					<ul style="list-style-type: none"> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					RAV4 [A2] - RAV4 2.0 Diesel Turbo	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> </ul>	

**• Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

2001/05 - 2005/11	1CDFTV	2.0	116	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					RAV4 [A3] - RAV4 2.4 4X4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1



2005/11 - 2012/11	2AZFE	2.4	170	<ul style="list-style-type: none"> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

					<ul style="list-style-type: none"> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					RAV4 [A3] - RAV4 2.2 D-4D	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> </ul> </li> </ul>	

- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean

2005/11 - 2012/11	2ADFTV	2.2	136 - 150	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA				RAV4 [A3] - RAV4 2.0	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> </ul> </li> </ul>

2008/12  
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2012/11

3ZRFAE

2.0

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Gear box control  
Transmission control ECT 2.2

- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode

- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve



Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> </ul> </li> </ul>

2005/11  
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2007/10

5GRFE

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Engine control  
TCCS II V3

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

					<ul style="list-style-type: none"> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Reiz - Reiz 3.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> </ul>	

2005/11 -	3GRFE	3.0	231	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> </ul>
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- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control

					<ul style="list-style-type: none"> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Sequoia - Sequoia 4.7**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC

2000/09 - 2007/08	2UZFE	4.7	243 - 277	<ul style="list-style-type: none"> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul>



• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda

Gear box control  
Transmission control ECT 2.2

actual value

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve

					<ul style="list-style-type: none"> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Sequoia - Sequoia 4.7 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)

- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1

2000/09 - 2007/08	2UZFE	4.7	243 - 277	<ul style="list-style-type: none"> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

					<ul style="list-style-type: none"> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Sienna - Sienna 3.0	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> </ul> </li> </ul>



- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system

Engine control  
TCCS II V3

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve

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- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve

Gear box control  
Transmission control ECT 2.2

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

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• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve



Gear box control  
Transmission control ECT 2.2

- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)

- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve

					<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Sienna - Sienna 3.3 4x4</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring

2003/09 - 2006/08	3MZFE	3.3	234	<ul style="list-style-type: none"> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> </ul>

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

Gear box control  
Transmission control ECT 2.2

system

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact

				<ul style="list-style-type: none"> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> </ul> </li> </ul>



Engine control  
TCCS II V3

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

<p>2004/09 - 2005/08</p>	<p>3MZFE</p>	<p>3.3</p>	<p>234</p>	<ul style="list-style-type: none"> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> <p><b>• Functional tests</b></p> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> </ul>
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- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1

					<ul style="list-style-type: none"> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Sienna - Sienna 3.5	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> </ul> </li> </ul>	

2006/09 -	2GRFE	3.5	270	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor</li> </ul>
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- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump

					<ul style="list-style-type: none"> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Solara Convertible - Solara 2.2 Convertible</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> </ul> </li> </ul>



Engine control  
TCCS II V3

- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control

1999/09 - 2001/08	5SFE	2.2	134	<ul style="list-style-type: none"> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> </ul> </li> </ul>				

- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

Gear box control  
Transmission control ECT 2.2

- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM

					<ul style="list-style-type: none"> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Solara Convertible - Solara 3.0 Convertible	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal

- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation

1999/09 - 2003/08	1MZFE	3.0	201	<ul style="list-style-type: none"> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> </ul> </li> </ul>



Gear box control  
Transmission control ECT 2.2

- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status

					<ul style="list-style-type: none"> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Solara Convertible - Solara 2.4 Convertible	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> </ul> </li> </ul>	

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

Engine control  
TCCS II V3

- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve

2001/09 - 2008/08	2AZFE	2.4	157	<ul style="list-style-type: none"> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS

					<ul style="list-style-type: none"> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Solara Convertible - Solara 3.3 Convertible	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> </ul> </li> </ul>	

- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported



Engine control  
TCCS II V3

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1

2003/09 - 2008/08	3MZFE	3.3	213 - 228	<ul style="list-style-type: none"> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)

- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1

					<ul style="list-style-type: none"> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA Solara Coupe - Solara 2.2 Coupe**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system

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				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> </ul> </li> </ul>

- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean



Gear box control  
Transmission control ECT 2.2

- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve

					<ul style="list-style-type: none"> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Solara Coupe - Solara 3.0 Coupe	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode

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- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve
  - EGR stepper motor
  - Variable valve timing Bank 2
  - Air control valve control motor
  - Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator

					<ul style="list-style-type: none"> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Solara Coupe - Solara 2.4 Coupe	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor



2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump

2001/09 - 2008/08	2AZFE	2.4	157	<ul style="list-style-type: none"> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems

					<ul style="list-style-type: none"> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Solara Coupe - Solara 3.3 Coupe	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b></li> </ul>	

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean

Engine control  
TCCS II V3

- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil

2003/09 - 2008/08	3MZFE	3.3	213 - 228	<ul style="list-style-type: none"> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)



- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

TOYOTA

Soluna Vios - Soluna Vios 1.5i

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> </ul> </li> </ul>

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Engine control  
TCCS II V3

- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status

					<ul style="list-style-type: none"> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Starlet [P8] - Starlet 1.3i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> </ul> </li> </ul>	

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

-	4EFE	1.3	135	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> </ul> </li> </ul>
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				<ul style="list-style-type: none"> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> </ul> </li> </ul>

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Gear box control  
Transmission control ECT 2.2

- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS



					<ul style="list-style-type: none"> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Starlet [P8] - Starlet 1.3i 12V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> </ul> </li> </ul>	

- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported

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Gear box control  
Transmission control ECT 2.2

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1

					<ul style="list-style-type: none"> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Starlet [P9] - Starlet 1.3i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> </ul> </li> </ul>	

<p>1996/01 - 1999/07</p>	<p>4EFE</p>	<p>1.3</p>	<p>82 - 84</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for ovedrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> </ul>
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- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve

					<ul style="list-style-type: none"> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA** **Starlet [P9] - Starlet 1.3i 16V Turbo**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> </ul> </li> </ul>

1996/01  
-  
1999/07

4EFTE

1.3

135

Gear box control  
Transmission control ECT 2.2

- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring



					<ul style="list-style-type: none"> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					T100 - T100 2.7i 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b></li> </ul>	

- Adaptive parameters reset
- Write vehicle identification number (VIN)
- **Current values**
- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value

1993/09 - 1998/08	3RZFE	2.7	150	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> </ul>
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					<ul style="list-style-type: none"> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA Tacoma - Tacoma 2.4i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)

- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation

1995/01 - 2004/08	2RZFE	2.4	141	<ul style="list-style-type: none"> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring



					<ul style="list-style-type: none"> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Tacoma - Tacoma 3.4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> </ul> </li> </ul>	

- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

Engine control  
TCCS II V3

- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve

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- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)

Gear box control  
Transmission control ECT 2.2

- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU

- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve
  - EGR stepper motor
  - Variable valve timing Bank 2
  - Air control valve control motor
  - Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> </ul> </li> </ul>

Engine control  
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- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time



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• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve

Gear box control  
Transmission control ECT 2.2

- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)

- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve

					<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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**TOYOTA Tacoma - Tacoma 2.7 4x4**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring

1994/09 - 2003/09	3RZFE	2.7	150	<ul style="list-style-type: none"> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> </ul>

- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich

Gear box control  
Transmission control ECT 2.2

- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air



					<ul style="list-style-type: none"> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA				Tacoma - Tacoma 2.7i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)

- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor

1995/01 -	2RZFE	2.7	150	<ul style="list-style-type: none"> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> </ul> </li> </ul>
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Gear box control  
Transmission control ECT 2.2

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

					<ul style="list-style-type: none"> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Tacoma - Tacoma 4.0 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> </ul>	

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

-	1GRFE	4.0	238	TCCS II V3	<ul style="list-style-type: none"> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA				Tacoma - Tacoma 2.7	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU

<p>1994/09 - 2003/09</p>	<p>3RZFE</p>	<p>2.7</p>	<p>152</p>		<ul style="list-style-type: none"> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> </ul> </li> </ul>
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- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay

					<ul style="list-style-type: none"> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Tacoma - Tacoma 2.4i 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)

- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve



1994/09 - 2004/08	2RZFE	2.4	141	<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring

					<ul style="list-style-type: none"> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Tacoma - Tacoma 4.0	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> </ul> </li> </ul>

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

2004/09 -	1GRFE	4.0	238	Gear box control Transmission control ECT 2.2	<p>system</p> <ul style="list-style-type: none"> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Tundra - Tundra 4.7	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> </ul> </li> </ul>	

Engine control  
TCCS II V3

- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)

- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2



1999/09 - 2006/08	2UZFE	4.7	243	<ul style="list-style-type: none"> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> </ul> </li> </ul>

Gear box control  
Transmission control ECT 2.2

- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply

					<ul style="list-style-type: none"> <li>- Engine run time</li> <li>• <b>Actuators</b></li> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Tundra - Tundra 4.7 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b></li> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> <li>• <b>Current values</b></li> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> </ul>	

Engine control  
TCCS II V3

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control

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- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve

Gear box control  
Transmission control ECT 2.2

- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control

					<ul style="list-style-type: none"> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Tundra - Tundra 3.4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> </ul>



• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda

Engine control  
TCCS II V3

actual value

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve

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- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
  - Diagnosis/electronics test
  - Gear selection
  - Evaporative emission control system leak test
  - Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement

Gear box control  
Transmission control ECT 2.2

- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve

- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1
  - Cooling fan actuation
  - HC absorber solenoid valve

					<ul style="list-style-type: none"> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Tundra - Tundra 3.4 4x4</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> </ul> </li> </ul>

Engine control  
TCCS II V3

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

1999/09 - 2004/08	5VZFE	3.4	193		<ul style="list-style-type: none"> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> </ul> </li> </ul>



- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

Gear box control  
Transmission control ECT 2.2

- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve

					<ul style="list-style-type: none"> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>VIOS - VIOS 1.3i</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> </ul> </li> </ul>

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Engine control  
TCCS II V3

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection

- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported

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Engine control  
TCCS II V3

- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2

				<ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> </ul> </li> </ul>



2008/03

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Engine control  
TCCS II V3

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1

					<ul style="list-style-type: none"> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>VIOS - VIOS 1.5</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> </ul> </li> </ul>

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Engine control  
TCCS II V3

- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system

					<ul style="list-style-type: none"> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					VIOS - VIOS 1.5i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> </ul> </li> </ul>	

- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich

2006/07 -	3SZ	1.5	102	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Wish - Wish 2.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> </ul> </li> </ul>	



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Engine control  
TCCS II V3

- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)

- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor

					<ul style="list-style-type: none"> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Yaris - Yaris 1.0i 16V</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> </ul> </li> </ul>

1999/01 - 2002/12	1SZFE	1.0	68	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> </ul>
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			<ul style="list-style-type: none"> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> </ul> </li> </ul>

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Engine control  
TCCS II V3

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control

					<ul style="list-style-type: none"> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Yaris - Yaris 1.3i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> </ul> </li> </ul>	



<p>1999/08 - 2002/12</p>	<p>2NZFE</p>	<p>1.3</p>	<p>90</p>	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> </ul>
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			<ul style="list-style-type: none"> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> </ul> </li> </ul>

- Injected quantity
- **Adjustments / settings**
  - Adaptive parameters reset
  - Write vehicle identification number (VIN)
- **Current values**
  - Short-term AFR correction B2
  - Long-term AFR correction B2
  - Solenoid valve, swirl control
  - Sol. valve, variable intake system
  - Contact idle
  - Regulator idle mode: pulse-duty factor
  - kick-down switch
  - circuit compressor control
  - Winter switch
  - EGR valve - system
  - Oxygen sensor 1
  - Oxygen sensor 2
  - regulation factor / fuel mixture content (lambda factor) 1
  - regulation factor fuel mixture content (lambda factor) 2
  - electric fuel pump
  - exhausted gases pressure regul. valve
  - fuel system - bank 1
  - fuel system - bank 2
  - Adjust. revolutions idle
  - Oil
  - Canister valve active carbon filter
  - Direct transmission Converter lockup
  - Tiptronic switch: lower gear engagement
  - Tiptronic switch: upper gear engagement
  - Air mass, actual value
  - exhausted gases recirculation control
  - secondary air switch. valve
  - Solenoid valve: switch. intake manifold 1
  - Solenoid valve: switch. intake manifold 1
  - EGR-magnetic valve step position
  - Ventilation solenoid valve
  - Lambda-control (bank 2, sensor 2)
  - Current gear
  - Lambda controller Lambda probe (B1,S1)
  - Lambda controller Lambda probe (B2,S1)
  - Charging-air pressure magnetic valve
  - Secondary system in limp-home mode
  - Exhaust pipe bypass solenoid valve
  - Overdrive deactivation solen. valve
  - Switch for overdrive deactivation
  - Secondary air system status
  - Idle actuator, position
  - Engine stop request
  - intake manifold pressure
  - Oxygen sensor value (bank 1, sensor 3)
  - Oxygen sensor value (bank 1, sensor 4)
  - Oxygen sensor value (bank 2, sensor 3)
  - Oxygen sensor value (bank 2, sensor 4)
  - Lambda regulation (bank 1, sensor 2)
  - Air compressor switch off
  - Stop light switch 1
  - Ingestion control valve
  - Air relief valve
  - Fuel tank leakage diagnostic pump
  - Air system
  - Catalyst completed
  - Heated catalyst supported
  - Secondary air system supported
  - Oxygen sensor supported
  - Oxygen sensor heating supported
  - Diagnosis mode

2002/05  
-  
2005/08

2SZFE

1.3

86

Engine control  
TCCS II V3

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay

					<ul style="list-style-type: none"> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Yaris - Yaris 1.5i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> </ul> </li> </ul>	

2001/01 - 2005/08	1NZ-FE	1.5	106	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for ovedrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> </ul>
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- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1

					<ul style="list-style-type: none"> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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<b>TOYOTA</b>	<b>Yaris - Yaris 1.3 VVT-i</b>
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> </ul> </li> </ul>



2006/01 -	2NZFE	1.3	87	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> <li>- Stop light switch 1</li> <li>- Ingestion control valve</li> <li>- Air relief valve</li> <li>- Fuel tank leakage diagnostic pump</li> <li>- Air system</li> <li>- Catalyst completed</li> <li>- Heated catalyst supported</li> <li>- Secondary air system supported</li> <li>- Oxygen sensor supported</li> <li>- Oxygen sensor heating supported</li> <li>- Diagnosis mode</li> <li>- Oxygen sensor (bank 2, sensor 1) Lambda actual value</li> <li>- Lambda sensor (B1,S1) Lambda actual value</li> <li>- LS (b1, s1) switch time rich to lean</li> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> </ul>
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					<ul style="list-style-type: none"> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA					Yaris Verso - Yaris Verso 1.5i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> </ul>	

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

1999/08 - 2005/09	1NZFE	1.5	110	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- LS (b2, s1) switch time rich to lean</li> <li>- LS (b1, s1) switch time lean to rich</li> <li>- LS (b2, s1) switch time lean to rich</li> <li>- Tank ventilation system: vapour pressure in the system</li> <li>- Throttle valve closing duty cycle</li> <li>- LS (b1,s2) switch time rich to lean</li> <li>- LS (b2,s2) switch time rich to lean</li> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> </ul> </li> </ul>
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					<ul style="list-style-type: none"> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
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TOYOTA					Yaris Verso - Yaris Verso 1.3i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> </ul> </li> </ul>	

2000/03  
-  
2005/09

2NZFE

1.3

86

Engine control  
TCCS II V3

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
  - Stepping motor, adjust. Idle mode
  - Turbo compressor regulator
  - Intake manifold change-over valve 1
  - Intake manifold change-over valve 2
  - Fuel pump relay
  - Fuel blocking valve
  - EGR valve - system
  - fuel evaporation pressure sensor
  - turbo charger regulating valve
  - Oil
  - LL-controller PWM
  - Solenoid valve: secondary air
  - Air conditioner compressor contact
  - Fuel pressure increase, solenoid valve
  - Intake air swirl, solenoid valve
  - Idle increase solenoid valve
  - Vent inhibit solenoid valve
  - Overdrive deactivation solenoid valve
  - Exhaust pipe bypass solenoid valve
  - Slip control solenoid valve
  - Bypass valve, evaporative emiss. control
  - Switchable intake manifold, solenoid valve
  - Air control valve
  - Engine mounting control
  - Electrical fuel pump
  - Tank leakage pump
  - Air relief valve
  - Air control valve
  - Pressure-regulation magnetic valve 1
  - Variable valve timing, bank 1
  - Fuel pressure regulation
  - Exhaust gas pressure control valve 1
  - Fuel shut-off solenoid valve 1

				<ul style="list-style-type: none"> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> <li>- circuit compressor control</li> <li>- Winter switch</li> <li>- EGR valve - system</li> <li>- Oxygen sensor 1</li> <li>- Oxygen sensor 2</li> <li>- regulation factor fuel mixture content (lambda factor) 1</li> <li>- regulation factor fuel mixture content (lambda factor) 2</li> <li>- electric fuel pump</li> <li>- exhausted gases pressure regul. valve</li> <li>- fuel system - bank 1</li> <li>- fuel system - bank 2</li> <li>- Adjust. revolutions idle</li> <li>- Oil</li> <li>- Canister valve active carbon filter</li> <li>- Direct transmission Converter lockup</li> <li>- Tiptronic switch: lower gear engagement</li> <li>- Tiptronic switch: upper gear engagement</li> <li>- Air mass, actual value</li> <li>- exhausted gases recirculation control</li> <li>- secondary air switch. valve</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- Solenoid valve: switch. intake manifold 1</li> <li>- EGR-magnetic valve step position</li> <li>- Ventilation solenoid valve</li> <li>- Lambda-control (bank 2, sensor 2)</li> <li>- Current gear</li> <li>- Lambda controller Lambda probe (B1,S1)</li> <li>- Lambda controller Lambda probe (B2,S1)</li> <li>- Charging-air pressure magnetic valve</li> <li>- Secondary system in limp-home mode</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Overdrive deactivation solen. valve</li> <li>- Switch for overdrive deactivation</li> <li>- Secondary air system status</li> <li>- Idle actuator, position</li> <li>- Engine stop request</li> <li>- intake manifold pressure</li> <li>- Oxygen sensor value (bank 1, sensor 3)</li> <li>- Oxygen sensor value (bank 1, sensor 4)</li> <li>- Oxygen sensor value (bank 2, sensor 3)</li> <li>- Oxygen sensor value (bank 2, sensor 4)</li> <li>- Lambda regulation (bank 1, sensor 2)</li> <li>- Air compressor switch off</li> </ul> </li> </ul>



1999/08  
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2005/09

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Engine control  
TCCS II V3

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

					<ul style="list-style-type: none"> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> <li>- Overdrive deactivation solenoid valve</li> <li>- Exhaust pipe bypass solenoid valve</li> <li>- Slip control solenoid valve</li> <li>- Bypass valve, evaporative emiss. control</li> <li>- Switchable intake manifold, solenoid valve</li> <li>- Air control valve</li> <li>- Engine mounting control</li> <li>- Electrical fuel pump</li> <li>- Tank leakage pump</li> <li>- Air relief valve</li> <li>- Air control valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Variable valve timing, bank 1</li> <li>- Fuel pressure regulation</li> <li>- Exhaust gas pressure control valve 1</li> <li>- Fuel shut-off solenoid valve 1</li> <li>- Cooling fan actuation</li> <li>- HC absorber solenoid valve</li> <li>- EGR stepper motor</li> <li>- Variable valve timing Bank 2</li> <li>- Air control valve control motor</li> <li>- Ingestion control valve</li> </ul> </li> </ul>
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TOYOTA				Yaris [P9, JTD] - Yaris 1.0 VVT-i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Diagnosis/electronics test</li> <li>- Gear selection</li> <li>- Evaporative emission control system leak test</li> <li>- Injected quantity</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Write vehicle identification number (VIN)</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Short-term AFR correction B2</li> <li>- Long-term AFR correction B2</li> <li>- Solenoid valve, swirl control</li> <li>- Sol. valve, variable intake system</li> <li>- Contact idle</li> <li>- Regulator idle mode: pulse-duty factor</li> <li>- kick-down switch</li> </ul> </li> </ul>

- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean

2005/08 - 2011/07	1KRFE	1.0	69	Engine control TCCS II V3	<ul style="list-style-type: none"> <li>- Oxygen sensor monitoring</li> <li>- Lean sensor current(bank 1,sensor 1)</li> <li>- Lean sensor current(bank 1,sensor 2)</li> <li>- Lean sensor mixture correction (B1,S1)</li> <li>- Lean sensor mixture correction (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S2)</li> <li>- Lambda control/Lambda sensor (B1,S3)</li> <li>- Lambda control/Lambda sensor (B1,S4)</li> <li>- Lambda control, oxygen sensor (bank 2, sensor 2)</li> <li>- Lambda control/Lambda sensor (B2,S3)</li> <li>- Lambda control/Lambda sensor (B2,S4)</li> <li>- Air conditioner monitoring status</li> <li>- Oxygen sensor status (B1, S2)</li> <li>- Oxygen sensor status (bank 2, sensor 2)</li> <li>- Fuel shutoff status</li> <li>- Electrical power steering, signal</li> <li>- Air bypass solenoid valve</li> <li>- Oxygen sensor voltage (bank 1-sensor 3)</li> <li>- Oxygen sensor voltage (bank 1, sensor 4)</li> <li>- Oxygen sensor voltage (bank 2, sensor 3)</li> <li>- Oxygen sensor voltage (bank 2, sensor 4)</li> <li>- Evap. emissions control regulating valve status</li> <li>- Sports mode</li> <li>- Fault codes count</li> <li>- Throttle valve position 2</li> <li>- Solenoid switch valve DSU</li> <li>- Solenoid switch valve SLC</li> <li>- Solenoid shift valve SLD</li> <li>- Switch solenoid valve SLN</li> <li>- Solenoid shift valve SLS</li> <li>- Switch solenoid valve SLU</li> <li>- Catalytic converter control</li> <li>- Evapor. emission control monitoring</li> <li>- Secondary air system monitoring</li> <li>- Air conditioner monitoring</li> <li>- Lambda sensor heating circuit monitoring</li> <li>- Monitoring of sub-systems</li> <li>- Monitoring of fuel system</li> <li>- Misfire detection monitoring</li> <li>- EGR system monitoring</li> <li>- Evapor. emission control monitoring</li> <li>- Heated catalyt. converter monitoring</li> <li>- DK control motor actuation current 1</li> <li>- Gear down</li> <li>- System power mode status</li> <li>- Engine speed on misfiring</li> <li>- Engine load on misfiring</li> <li>- Throttle valve actuator power supply</li> <li>- Engine run time</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Stepping motor, adjust. Idle mode</li> <li>- Turbo compressor regulator</li> <li>- Intake manifold change-over valve 1</li> <li>- Intake manifold change-over valve 2</li> <li>- Fuel pump relay</li> <li>- Fuel blocking valve</li> <li>- EGR valve - system</li> <li>- fuel evaporation pressure sensor</li> <li>- turbo charger regulating valve</li> <li>- Oil</li> <li>- LL-controller PWM</li> <li>- Solenoid valve: secondary air</li> <li>- Air conditioner compressor contact</li> <li>- Fuel pressure increase, solenoid valve</li> <li>- Intake air swirl, solenoid valve</li> <li>- Idle increase solenoid valve</li> <li>- Vent inhibit solenoid valve</li> </ul> </li> </ul>
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				<ul style="list-style-type: none"><li>- Overdrive deactivation solenoid valve</li><li>- Exhaust pipe bypass solenoid valve</li><li>- Slip control solenoid valve</li><li>- Bypass valve, evaporative emiss. control</li><li>- Switchable intake manifold, solenoid valve</li><li>- Air control valve</li><li>- Engine mounting control</li><li>- Electrical fuel pump</li><li>- Tank leakage pump</li><li>- Air relief valve</li><li>- Air control valve</li><li>- Pressure-regulation magnetic valve 1</li><li>- Variable valve timing, bank 1</li><li>- Fuel pressure regulation</li><li>- Exhaust gas pressure control valve 1</li><li>- Fuel shut-off solenoid valve 1</li><li>- Cooling fan actuation</li><li>- HC absorber solenoid valve</li><li>- EGR stepper motor</li><li>- Variable valve timing Bank 2</li><li>- Air control valve control motor</li><li>- Ingestion control valve</li></ul>
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[C30 - C30 1.6](#)

[C30 - C30 1.8](#)

[C30 - C30 2.0](#)

[C30 - C30 2.4i](#)

[C30 - C30 T5](#)

[C30 - C30 1.6D DRIVe](#)

[C30 - C30 2.0D](#)

[C30 - C30 D5](#)

[C30 - C30 1.8 F Flexifuel](#)

[C30 - C30 2.0 F Flexifuel](#)

[C30 - C30 Electric](#)

[C30 - C30 D2 DRIVe](#)

[C30 - C30 D3](#)

[C30 - C30 D4](#)

[C70 Coupe - C70 2.3 T5 Coupe](#)

[C70 Coupe - C70 2.4 20V Coupe](#)

[C70 Coupe - C70 2.0 T Coupe](#)

[C70 Coupe - C70 2.4 T Coupe](#)

[C70 Coupe - C70 2.5 LPT Coupe](#)

[C70 Coupe - C70 2.5 20V Coupe](#)

[C70 I Cabrio - C70 I 2.3 T5 Cabrio](#)

[C70 I Cabrio - C70 I 2.4 Cabrio](#)

[C70 I Cabrio - C70 I 2.4 T Cabrio](#)

[C70 I Cabrio - C70 I 2.0 T Cabrio](#)

[C70 I Cabrio - C70 I 2.4 T5 Cabrio](#)

[C70 II - C70 II 2.4](#)

[C70 II - C70 II 2.4i](#)

[C70 II - C70 II T5](#)

[C70 II - C70 II D5](#)

[C70 II - C70 II 2.4D](#)

[C70 II - C70 II 2.0D](#)

[C70 II - C70 II D3](#)

[C70 II - C70 II D4](#)

[S40 II - S40 II 2.4](#)

[S40 II - S40 II 2.5 T5](#)

[S40 II - S40 II 2.0D](#)

[S40 II - S40 II 1.6D DRIVe](#)

[S40 II - S40 II 1.8](#)

[S40 II - S40 II 1.6](#)

[S40 II - S40 II 2.5 T5 AWD](#)

[S40 II - S40 II D5](#)

[S40 II - S40 II 1.8 F Flexifuel](#)

[S40 II - S40 2.4](#)

[S40 II - S40 2.5 T5](#)

[S40 II - S40 II 2.4i](#)

[S40 II - S40 II 2.0](#)

[S40 II - S40 II 2.0 F Flexifuel](#)  
[S40 II - S40 II D2](#)  
[S40 II - S40 II D3](#)  
[S40 II - S40 II D4](#)  
[S60 I - S60 I 2.3 T5](#)  
[S60 I - S60 I 2.4](#)  
[S60 I - S60 I 2.4 T](#)  
[S60 I - S60 I 2.0 T](#)  
[S60 I - S60 I 2.4D](#)  
[S60 I - S60 I 2.4 T AWD](#)  
[S60 I - S60 I R AWD](#)  
[S60 I - S60 I 2.5 T AWD](#)  
[S60 I - S60 I 2.5 T](#)  
[S60 I - S60 I 2.4 T5](#)  
[S60 I - S60 I D5](#)  
[S60 I - S60 I D](#)  
[S60 I - S60 I 2.4 Bi-Fuel CNG](#)  
[S60 I - S60 I 2.4 Bi-Fuel LPG](#)  
[S60 II - S60 II 2.0T](#)  
[S60 II - S60 II D3](#)  
[S60 II - S60 II D5](#)  
[S60 II - S60 II D5 AWD](#)  
[S60 II - S60 II T6 AWD](#)  
[S60 II - S60 II T3](#)  
[S60 II - S60 II T4](#)  
[S60 II - S60 II T5](#)  
[S60 II - S60 II DRIVe](#)  
[S60 II - S60 II T4F](#)  
[S60 II - S60 II 2.5T5](#)  
[S60 II - S60 II D4](#)  
[S60 II - S60 II 2.0T4](#)  
[S60 II - S60 II 2.0T5](#)  
[S70 - S70 2.4](#)  
[S70 - S70 2.4 AWD](#)  
[S70 - S70 2.0](#)  
[S70 - S70 2.5](#)  
[S70 - S70 2.5 20V](#)  
[S70 - S70 2.3 T-5](#)  
[S70 - S70 TDI](#)  
[S70 - S70 2.0 T](#)  
[S70 - S70 R 2.3 T](#)  
[S70 - S70 2.3](#)  
[S70 - S70 2.5 T](#)  
[S70 - S70 2.5 T AWD](#)  
[S70 - S70 2.5 Bifuel](#)  
[S70 - S70 2.0 T 20V](#)  
[S70 - S70 R 2.3 T AWD](#)  
[S70 - S70 2.0 T AWD](#)

[S80 - S80 2.3i T](#)  
[S80 I - S80 I 2.0T5](#)  
[S80 I - S80 I 2.9](#)  
[S80 I - S80 I 2.8 T6](#)  
[S80 I - S80 I 2.0T](#)  
[S80 I - S80 I 2.5 TDI](#)  
[S80 I - S80 I 2.4 Bi-Fuel LPG](#)  
[S80 I - S80 I 2.4](#)  
[S80 I - S80 I 2.0 T](#)  
[S80 I - S80 I D5](#)  
[S80 I - S80 I 2.4 T4 Bi-Fuel CNG](#)  
[S80 I - S80 I 2.4D](#)  
[S80 I - S80 I 3.0](#)  
[S80 I - S80 I 3.0 T6](#)  
[S80 I - S80 I 2.4T](#)  
[S80 I - S80 I 2.5 AWD](#)  
[S80 I - S80 I 2.5](#)  
[S80 I - S80 I 2.4T AWD](#)  
[S80 I - S80 I 2.3R](#)  
[S80 II - S80 II D5](#)  
[S80 II - S80 II 2.4D](#)  
[S80 II - S80 II 2.5T](#)  
[S80 II - S80 II 3.2](#)  
[S80 II - S80 II 3.2 AWD](#)  
[S80 II - S80 II T6 AWD](#)  
[S80 II - S80 II D5 AWD](#)  
[S80 II - S80 II 2.0B](#)  
[S80 II - S80 II 2.0 F Flexifuel](#)  
[S80 II - S80 II 2.0D](#)  
[S80 II - S80 II 2.5 FT Flexifuel](#)  
[S80 II - S80 II 2.5 FT Fexifuel](#)  
[S80 II - S80 II T5](#)  
[S80 II - S80 II T4](#)  
[S80 II - S80 II D3](#)  
[S80 II - S80 II 3.0T](#)  
[S80 II - S80 II T4F](#)  
[S80 II - S80 II D4](#)  
[S80 II - S80 II DRIVe](#)  
[S80 II - S80 II 1.6D DRIVe](#)  
[S80 II - S80 II 2.0T](#)  
[S80 II - S80 II V8 AWD](#)  
[V40 CROSS COUNTRY - V40 1.6 T4 CROSS COUNTRY](#)  
[V40 CROSS COUNTRY - V40 2.0 T5 CROSS COUNTRY](#)  
[V40 CROSS COUNTRY - V40 2.0 T5 AWD CROSS COUNTRY](#)  
[V40 CROSS COUNTRY - V40 2.5 T5 CROSS COUNTRY](#)  
[V40 CROSS COUNTRY - V40 2.5 T5 AWD CROSS COUNTRY](#)  
[V40 CROSS COUNTRY - V40 1.6 D2 CROSS COUNTRY](#)  
[V40 CROSS COUNTRY - V40 2.0 D3 CROSS COUNTRY](#)



[V40 CROSS COUNTRY - V40 2.0 D4 CROSS COUNTRY](#)

[V40 CROSS COUNTRY - V40 2.0 T4 CROSS COUNTRY](#)

[V40 I - V40 I T4](#)

[V40 I - V40 I 1.8 16V](#)

[V40 I - V40 I 2.0](#)

[V40 I - V40 I 1.6 16V](#)

[V40 I - V40 I 1.9 T4](#)

[V40 I - V40 I 2.0 16V T](#)

[V40 I - V40 I 2.0 T](#)

[V40 I - V40 I 2.0 T4](#)

[V40 I - V40 I 2.0 16V](#)

[V40 II - V40 II T3](#)

[V40 II - V40 II T4](#)

[V40 II - V40 II D2](#)

[V40 II - V40 II D3](#)

[V40 II - V40 II D4](#)

[V40 II - V40 II T5](#)

[V50 - V50 T5](#)

[V50 - V50 2.4](#)

[V50 - V50 2.4i](#)

[V50 - V50 2.0D](#)

[V50 - V50 1.6D DRIVe](#)

[V50 - V50 1.8](#)

[V50 - V50 1.6](#)

[V50 - V50 T5 AWD](#)

[V50 - V50 D5](#)

[V50 - V50 1.8 F Flexifuel](#)

[V50 - V50 2.0](#)

[V50 - V50 2.0 F Flexifuel](#)

[V50 - V50 D2 DRIVe](#)

[V50 - V50 D3](#)

[V50 - V50 D4](#)

[V60 - V60 2.0T](#)

[V60 - V60 T6 AWD](#)

[V60 - V60 D3](#)

[V60 - V60 D5](#)

[V60 - V60 T3](#)

[V60 - V60 T4](#)

[V60 - V60 T5](#)

[V60 - V60 D5 AWD](#)

[V60 - V60 DRIVe](#)

[V60 - V60 T4F](#)

[V60 - V60 D4](#)

[V60 - V60 D5 Hybrid AWD](#)

[V60 - V60 D4 AWD](#)

[V70 - V70 2.3i](#)

[V70 - V70 R 2.3 AWD](#)

[V70 I - V70 I 2.0](#)

[V70 I - V70 I 2.5](#)  
[V70 I - V70 I 2.5 20V](#)  
[V70 I - V70 I T-5](#)  
[V70 I - V70 I 2.5 TDI](#)  
[V70 I - V70 I 2.0 Turbo](#)  
[V70 I - V70 I 2.5 T AWD](#)  
[V70 I - V70 I 2.3R](#)  
[V70 I - V70 I 2.3](#)  
[V70 I - V70 I 2.5 T](#)  
[V70 I - V70 I R 2.3 AWD](#)  
[V70 I - V70 I 2.5 T XC AWD](#)  
[V70 I - V70 I 2.5 BI-FUEL](#)  
[V70 I - V70 I 2.5 AWD](#)  
[V70 I - V70 I 2.4](#)  
[V70 I - V70 I T-5 AWD](#)  
[V70 I - V70 I 2.0 AWD Turbo](#)  
[V70 I - V70 I 2.0 T 20V](#)  
[V70 I - V70 I 2.5 T XC](#)  
[V70 I - V70 I 2.3 AWD](#)  
[V70 I - V70 I XC AWD](#)  
[V70 I - V70 I 2.5T](#)  
[V70 II - V70 II 2.0 T](#)  
[V70 II - V70 II 2.4 T](#)  
[V70 II - V70 II 2.3 T5](#)  
[V70 II - V70 II XC AWD](#)  
[V70 II - V70 II 2.4](#)  
[V70 II - V70 II 2.5D](#)  
[V70 II - V70 II 2.4D](#)  
[V70 II - V70 II 2.5 BI-FUEL CNG](#)  
[V70 II - V70 II 2.5 BI-FUEL LPG](#)  
[V70 II - V70 II 2.5 T AWD](#)  
[V70 II - V70 II 2.4D AWD](#)  
[V70 II - V70 II R 2.5 T AWD](#)  
[V70 II - V70 II 2.5 T](#)  
[V70 II - V70 II 2.4 T5](#)  
[V70 II - V70 II D5](#)  
[V70 II - V70 II D5 AWD](#)  
[V70 II - V70 II 2.4 T AWD](#)  
[V70 II - V70 II 2.3](#)  
[V70 III - V70 III 3.2](#)  
[V70 III - V70 III 2.5 T](#)  
[V70 III - V70 III T6 AWD](#)  
[V70 III - V70 III 2.4D](#)  
[V70 III - V70 III D5](#)  
[V70 III - V70 III 3.2 AWD](#)  
[V70 III - V70 III D5 AWD](#)  
[V70 III - V70 III 2.0 F Flexifuel](#)  
[V70 III - V70 III 2.0B](#)

[V70 III - V70 III 2.0D](#)  
[V70 III - V70 III 2.5 FT Flexifuel](#)  
[V70 III - V70 III 1.6D DRIVe](#)  
[V70 III - V70 III 2.5 FT Flexifuel](#)  
[V70 III - V70 III 2.0 T](#)  
[V70 III - V70 III D3](#)  
[V70 III - V70 III T5](#)  
[V70 III - V70 III T4](#)  
[V70 III - V70 III 1.6 D DRIVe](#)  
[V70 III - V70 III T4F](#)  
[V70 III - V70 III 2.0 D4](#)  
[V70 III - V70 III 2.0 T5](#)  
[V70 III - V70 III D4 AWD](#)  
[XC60 - XC60 D5 AWD](#)  
[XC60 - XC60 2.4D AWD](#)  
[XC60 - XC60 T6 AWD](#)  
[XC60 - XC60 2.4D DRIVe](#)  
[XC60 - XC60 3.2 AWD](#)  
[XC60 - XC60 3.2](#)  
[XC60 - XC60 2.0T](#)  
[XC60 - XC60 D3 DRIVe](#)  
[XC60 - XC60 T5](#)  
[XC60 - XC60 D4 AWD](#)  
[XC60 - XC60 D3](#)  
[XC60 - XC60 D4](#)  
[XC70 I - XC70 I 2.5T AWD](#)  
[XC70 I - XC70 I 2.4D AWD](#)  
[XC70 I - XC70 I 2.3T AWD](#)  
[XC70 I - XC70 I D5 AWD](#)  
[XC70 I - XC70 I 2.4T AWD](#)  
[XC70 II - XC70 II D5 AWD](#)  
[XC70 II - XC70 II 3.2 AWD](#)  
[XC70 II - XC70 II 2.4D AWD](#)  
[XC70 II - XC70 II T6 AWD](#)  
[XC70 II - XC70 II 2.4D DRIVe](#)  
[XC70 II - XC70 II D3 DRIVe](#)  
[XC70 II - XC70 II 3.2 2WD](#)  
[XC70 II - XC70 II D3 AWD](#)  
[XC90 - XC90 2.5T AWD](#)  
[XC90 - XC90 T6 AWD](#)  
[XC90 - XC90 D5 AWD](#)  
[XC90 - XC90 2.5T FWD](#)  
[XC90 - XC90 V8 AWD](#)  
[XC90 - XC90 3.2 AWD](#)  
[XC90 - XC90 3.2 FWD](#)  
[XC90 - XC90 D3 FWD](#)  
[XC90 - XC90 T5 AWD](#)

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
<p>2006/10 -</p>	<p>B4164S3</p>	<p>1.6</p>	<p>100</p>	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> </ul> </li> </ul>

				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO				C30 - C30 1.8	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk60

- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Passenger compartment temperature
  - Engine status
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Kilometer reading
  - Transmission skidding control
  - Brake exertion electrical distribution
  - Steering wheel rotational speed
  - Ambient temperature
  - Brake pedal travel
  - ABS control
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored steering angle sensor offset
  - Vehicle acceleration
  - Brake pressure sensor
  - Stored brake pressure sensor offset
  - ESP control
  - Yaw rate sensor, offset
  - Front left wheel acceleration
  - Front right wheel acceleration
  - Rear left wheel acceleration
  - Rear right wheel acceleration
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
  - Torque reduction request by ASR
  - Central electronics power supply
  - Steering direction

Underbody/Steering  
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - control unit temperature
  - Power supply terminal 30
  - Steering wheel rotational speed
  - Engine status
  - Pump motor steering assistance
  - Power steering motor activation current
  - Power steering
  - Power steering motor activation
  - Power steering motor temperature

2006/10 - 2010/07	B4184S11	1.8	125		<ul style="list-style-type: none"> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul>
				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					C30 - C30 2.0	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> </ul> </li> </ul>	

Anti-block system  
ESP Teves Mk60

- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

Underbody/Steering  
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - control unit temperature
  - Power supply terminal 30
  - Steering wheel rotational speed
  - Engine status
  - Pump motor steering assistance
  - Power steering motor activation current
  - Power steering
  - Power steering motor activation
  - Power steering motor temperature
  - Speed-dependent power steering
  - Power steering motor specified speed
  - Power steering motor actual speed

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Basic adjustment, headlights auto adjustment
  - Reset undervoltage counter

2006/10 -	B4204S3	2.0	145	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
				<p>Parking assisting system</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

				Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul>
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					
C30 - C30 2.4i					
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> </ul> </li> </ul>

- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading

2006/10 - 2010/07	B5244S4	2.4	170	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> <li>- Time within 140 - 150 °C</li> <li>- Time &gt; 150 °C</li> <li>- Press. regul. sol. valve 1 set value</li> <li>- Pressure regulator solenoid valve 1 actual value</li> <li>- Pressure regulator solenoid valve 2 set value</li> <li>- Pressure regulator solenoid valve 2 actual value</li> <li>- Set value, solenoid valve, torque conv. lock-up</li> <li>- Convertor bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b></li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Alternator voltage functional test</li> <li>• <b>Adjustments / settings</b></li> <li>- Start mode</li> </ul>

Central electronics  
 Central electronics, front, 9.12.1

- Basic adjustment, headlights auto adjustment
- Reset undervoltage counter
- Reset crash detection signal
- Rear wiper with reverse gear
- **Error memory**
- **Current values**
  - Fuel pump relay
  - Power supply
  - Clutch switch
  - brake fluid level
  - Light switch
  - Back-up lights
  - Ignition key position
  - Main beam relay
  - Key code
  - Ignition key
  - Status Ignition lock
  - Windscreen washing water level
  - Front fog lights relay
  - Rear window wiper
  - Front windscreen wiper
  - Rear window froster relay
  - Vehicle power supply status
  - Headlight washer pump relay
  - Orientation light potentiometer
  - Rain sensor
  - Gas pedal position
  - Windshield washer relay
  - Rear window washer relay
- **Actuators**
  - Windshield washer system relay
  - Fog light
  - Headlights cleaning system
  - Relay for high-beam headlights
  - Rear window washer system

Immobilizer  
 Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adjustment: Unlocking options
- **Error memory**
- **Current values**
  - Power supply
  - Rear top unlocking switch
  - Brake pedal switch
  - Clutch pedal switch
  - Number of stored keys
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Remote control: Unlocking options
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Front left door handle button
  - Front right door handle button
  - Ignition lock activation
  - Rear right door handle button
  - Rear left door handle button
- **Actuators**
  - Unlock driver's door
  - Unlock front passenger's door
  - Unlock rear left door
  - Lock rear left door

- **Identification**
- **Clear errors**

				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					C30 - C30 T5	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> </ul> </li> </ul>	



ESP Teves Mk60

- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1

2006/10 - 2007/07	B5254T3	2.5	220	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> <li>- modulating pressure: solenoid valve 2</li> <li>- Torque limitation</li> <li>- Kilometer reading</li> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> <li>- Time within 140 - 150 °C</li> <li>- Time &gt; 150 °C</li> <li>- Press. regul. sol. valve 1 set value</li> <li>- Pressure regulator solenoid valve 1 actual value</li> <li>- Pressure regulator solenoid valve 2 set value</li> <li>- Pressure regulator solenoid valve 2 actual value</li> <li>- Set value, solenoid valve, torque conv. lock-up</li> <li>- Converter bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b></li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> </ul>

Central electronics  
Central electronics, front, 9.12.1

- Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Basic adjustment, headlights auto adjustment
  - Reset undervoltage counter
  - Reset crash detection signal
  - Rear wiper with reverse gear
- **Error memory**
- **Current values**
  - Fuel pump relay
  - Power supply
  - Clutch switch
  - brake fluid level
  - Light switch
  - Back-up lights
  - Ignition key position
  - Main beam relay
  - Key code
  - Ignition key
  - Status Ignition lock
  - Windscreen washing water level
  - Front fog lights relay
  - Rear window wiper
  - Front windscreen wiper
  - Rear window froster relay
  - Vehicle power supply status
  - Headlight washer pump relay
  - Orientation light potentiometer
  - Rain sensor
  - Gas pedal position
  - Windshield washer relay
  - Rear window washer relay
- **Actuators**
  - Windshield washer system relay
  - Fog light
  - Headlights cleaning system
  - Relay for high-beam headlights
  - Rear window washer system

Immobilizer  
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adjustment: Unlocking options
- **Error memory**
- **Current values**
  - Power supply
  - Rear top unlocking switch
  - Brake pedal switch
  - Clutch pedal switch
  - Number of stored keys
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Remote control: Unlocking options
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Front left door handle button
  - Front right door handle button
  - Ignition lock activation
  - Rear right door handle button
  - Rear left door handle button
- **Actuators**
  - Unlock driver's door
  - Unlock front passenger's door
  - Unlock rear left door

				<ul style="list-style-type: none"> <li>- Lock rear left door</li> </ul>
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>
			<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> </ul> </li> </ul>

- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading

2007/08	B5254T7	2.5	230	<p>Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> <li>- Time within 140 - 150 °C</li> <li>- Time &gt; 150 °C</li> <li>- Press. regul. sol. valve 1 set value</li> <li>- Pressure regulator solenoid valve 1 actual value</li> <li>- Pressure regulator solenoid valve 2 set value</li> <li>- Pressure regulator solenoid valve 2 actual value</li> <li>- Set value, solenoid valve, torque conv. lock-up</li> <li>- Convertor bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b></li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Alternator voltage functional test</li> <li>• <b>Adjustments / settings</b></li> <li>- Start mode</li> </ul>

Central electronics  
 Central electronics, front, 9.12.1

- Basic adjustment, headlights auto adjustment
- Reset undervoltage counter
- Reset crash detection signal
- Rear wiper with reverse gear
- **Error memory**
- **Current values**
  - Fuel pump relay
  - Power supply
  - Clutch switch
  - brake fluid level
  - Light switch
  - Back-up lights
  - Ignition key position
  - Main beam relay
  - Key code
  - Ignition key
  - Status Ignition lock
  - Windscreen washing water level
  - Front fog lights relay
  - Rear window wiper
  - Front windscreen wiper
  - Rear window froster relay
  - Vehicle power supply status
  - Headlight washer pump relay
  - Orientation light potentiometer
  - Rain sensor
  - Gas pedal position
  - Windshield washer relay
  - Rear window washer relay
- **Actuators**
  - Windshield washer system relay
  - Fog light
  - Headlights cleaning system
  - Relay for high-beam headlights
  - Rear window washer system

Immobilizer  
 Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adjustment: Unlocking options
- **Error memory**
- **Current values**
  - Power supply
  - Rear top unlocking switch
  - Brake pedal switch
  - Clutch pedal switch
  - Number of stored keys
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Remote control: Unlocking options
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Front left door handle button
  - Front right door handle button
  - Ignition lock activation
  - Rear right door handle button
  - Rear left door handle button
- **Actuators**
  - Unlock driver's door
  - Unlock front passenger's door
  - Unlock rear left door
  - Lock rear left door

- **Identification**

				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO				C30 - C30 1.6D DRIVE	
Year	Engine	Liters	HP	System	Functions
				Anti-block system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> </ul> </li> </ul>



				<p>ESP Teves Mk60</p>	<ul style="list-style-type: none"> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul>
<p>2006/10 - 2011/07</p>	<p>D4164T...</p>	<p>1.6</p>	<p>109</p>	<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> </ul> </li> </ul>

				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>

VOLVO				C30 - C30 2.0D	
Year	Engine	Liters	HP	System	Functions
					• <b>Identification</b>

Anti-block system  
ESP Teves Mk60

- **Clear errors**
- **Functional tests**
  - ABS test
  - ASR test
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Passenger compartment temperature
  - Engine status
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Kilometer reading
  - Transmission skidding control
  - Brake exertion electrical distribution
  - Steering wheel rotational speed
  - Ambient temperature
  - Brake pedal travel
  - ABS control
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored steering angle sensor offset
  - Vehicle acceleration
  - Brake pressure sensor
  - Stored brake pressure sensor offset
  - ESP control
  - Yaw rate sensor, offset
  - Front left wheel acceleration
  - Front right wheel acceleration
  - Rear left wheel acceleration
  - Rear right wheel acceleration
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
  - Torque reduction request by ASR
  - Central electronics power supply
  - Steering direction

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - control unit temperature
  - Power supply terminal 30

2006/10 - 2010/09	D4204T	2.0	136	Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul>
				Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				Immobilizer	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> </ul> </li> </ul>

			Access system/immobilizer 2.0	<ul style="list-style-type: none"> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
			Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
			Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk60

- Battery voltage
- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

Underbody/Steering  
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - control unit temperature
  - Power supply terminal 30
  - Steering wheel rotational speed
  - Engine status
  - Pump motor steering assistance
  - Power steering motor activation current
  - Power steering
  - Power steering motor activation
  - Power steering motor temperature
  - Speed-dependent power steering
  - Power steering motor specified speed
  - Power steering motor actual speed

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Basic adjustment, headlights auto adjustment

2006/10 - 2007/07	D4204T2	2.0	131	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					
C30 - C30 D5					
Year	Engine	Liters	HP	System	Functions
				Anti-block system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> </ul> </li> </ul>



ESP Teves Mk60

- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1

2006/10 - 2010/07	D5244T9	2.4	163	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> <li>- modulating pressure: solenoid valve 2</li> <li>- Torque limitation</li> <li>- Kilometer reading</li> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> <li>- Time within 140 - 150 °C</li> <li>- Time &gt; 150 °C</li> <li>- Press. regul. sol. valve 1 set value</li> <li>- Pressure regulator solenoid valve 1 actual value</li> <li>- Pressure regulator solenoid valve 2 set value</li> <li>- Pressure regulator solenoid valve 2 actual value</li> <li>- Set value, solenoid valve, torque conv. lock-up</li> <li>- Converter bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b></li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> </ul>

Central electronics  
Central electronics, front, 9.12.1

- Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Basic adjustment, headlights auto adjustment
  - Reset undervoltage counter
  - Reset crash detection signal
  - Rear wiper with reverse gear
- **Error memory**
- **Current values**
  - Fuel pump relay
  - Power supply
  - Clutch switch
  - brake fluid level
  - Light switch
  - Back-up lights
  - Ignition key position
  - Main beam relay
  - Key code
  - Ignition key
  - Status Ignition lock
  - Windscreen washing water level
  - Front fog lights relay
  - Rear window wiper
  - Front windscreen wiper
  - Rear window froster relay
  - Vehicle power supply status
  - Headlight washer pump relay
  - Orientation light potentiometer
  - Rain sensor
  - Gas pedal position
  - Windshield washer relay
  - Rear window washer relay
- **Actuators**
  - Windshield washer system relay
  - Fog light
  - Headlights cleaning system
  - Relay for high-beam headlights
  - Rear window washer system

Immobilizer  
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adjustment: Unlocking options
- **Error memory**
- **Current values**
  - Power supply
  - Rear top unlocking switch
  - Brake pedal switch
  - Clutch pedal switch
  - Number of stored keys
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Remote control: Unlocking options
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Front left door handle button
  - Front right door handle button
  - Ignition lock activation
  - Rear right door handle button
  - Rear left door handle button
- **Actuators**
  - Unlock driver's door
  - Unlock front passenger's door
  - Unlock rear left door
  - Lock rear left door

				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					C30 - C30 1.8 F Flexifuel	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> </ul> </li> </ul>	

2006/10 - 2010/07	B4184S8	1.8	125	<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul>
				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> </ul> </li> </ul>

Central electronics  
Central electronics, front, 9.12.1

- Light switch
- Back-up lights
- Ignition key position
- Main beam relay
- Key code
- Ignition key
- Status Ignition lock
- Windscreen washing water level
- Front fog lights relay
- Rear window wiper
- Front windscreen wiper
- Rear window froster relay
- Vehicle power supply status
- Headlight washer pump relay
- Orientation light potentiometer
- Rain sensor
- Gas pedal position
- Windshield washer relay
- Rear window washer relay
- **Actuators**
  - Windshield washer system relay
  - Fog light
  - Headlights cleaning system
  - Relay for high-beam headlights
  - Rear window washer system

Immobilizer  
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adjustment: Unlocking options
- **Error memory**
- **Current values**
  - Power supply
  - Rear top unlocking switch
  - Brake pedal switch
  - Clutch pedal switch
  - Number of stored keys
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Remote control: Unlocking options
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Front left door handle button
  - Front right door handle button
  - Ignition lock activation
  - Rear right door handle button
  - Rear left door handle button
- **Actuators**
  - Unlock driver's door
  - Unlock front passenger's door
  - Unlock rear left door
  - Lock rear left door

Parking assisting system  
Park Distance Control 9.12.1

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Calculated distance at rear
  - Calculated front distance

- **Identification**
- **Adjustments / settings**
  - Battery replacement

				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> </ul> </li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul>
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VOLVO				C30 - C30 2.0 F Flexifuel	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul>
				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
2009/08	B4204S4	2.0	146	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> </ul> </li> </ul>



			<ul style="list-style-type: none"> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
		<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
		<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
		<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul>
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<b>VOLVO</b>				<b>C30 - C30 Electric</b>	
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> </ul> </li> </ul>

2011/08 -	E400V1	0.0	112		<ul style="list-style-type: none"> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul>
				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> </ul> </li> </ul>

- Rear window washer system

VOLVO				C30 - C30 D2 DRIVe	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60 UDS	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- ESP switch</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul> </li> </ul>
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>

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Central electronics  
Central electronics, front, 9.12.1

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Basic adjustment, headlights auto adjustment
  - Reset undervoltage counter
  - Reset crash detection signal
  - Rear wiper with reverse gear
- **Error memory**
- **Current values**
  - Fuel pump relay
  - Power supply
  - Clutch switch
  - brake fluid level
  - Light switch
  - Back-up lights
  - Ignition key position
  - Main beam relay
  - Key code
  - Ignition key
  - Status Ignition lock
  - Windscreen washing water level
  - Front fog lights relay
  - Rear window wiper
  - Front windscreen wiper
  - Rear window froster relay
  - Vehicle power supply status
  - Headlight washer pump relay
  - Orientation light potentiometer
  - Rain sensor
  - Gas pedal position
  - Windshield washer relay
  - Rear window washer relay
- **Actuators**
  - Windshield washer system relay
  - Fog light
  - Headlights cleaning system
  - Relay for high-beam headlights
  - Rear window washer system

Immobilizer  
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adjustment: Unlocking options
- **Error memory**
- **Current values**
  - Power supply
  - Rear top unlocking switch
  - Brake pedal switch
  - Clutch pedal switch
  - Number of stored keys
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Remote control: Unlocking options
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Front left door handle button
  - Front right door handle button
  - Ignition lock activation
  - Rear right door handle button
  - Rear left door handle button
- **Actuators**

					<ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul>
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					C30 - C30 D3	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk60 UDS	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- ESP switch</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul>
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
2010/08 -	D5204T5	2.0	150	Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> <ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
	<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
	<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul>
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<b>VOLVO</b>	<b>C30 - C30 D4</b>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60 UDS	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- ESP switch</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul> </li> </ul>
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> </ul> </li> </ul>

2010/08	D5204T	2.0	177	Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				Immobilizer Access system/immobilizer 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> <ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
			Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
			Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					C70 Coupe - C70 2.3 T5 Coupe	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> </ul> </li> </ul>	

1997/09 - 2002/07	B5234T3	2.3	240	Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
				Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>

				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
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VOLVO					C70 Coupe - C70 2.4 20V Coupe	
Year	Engine	Liters	HP	System	Functions	
				Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> </ul> </li> </ul>	

<p>1999/03 - 2000/07</p>	<p>B5244S</p>	<p>2.4</p>	<p>165</p>		<ul style="list-style-type: none"> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> <li>• <b>Actuators</b></li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul>
				<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> <li>• <b>Actuators</b></li> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>

Year	Engine	Liters	HP	System	Functions
				Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
1999/08 - 2002/07	B 5204 T4	2.0	163		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> </ul> </li> </ul>

				<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
1997/01 - 1998/07	B5204T2	2.0	180	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
1997/01 - 2000/07	B 5204 T3	2.0	225	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> </ul> </li> </ul>

- Current level LED circuit A
- Current level LED circuit B

VOLVO				C70 Coupe - C70 2.4 T Coupe	
Year	Engine	Liters	HP	System	Functions
				Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
1999/08 - 2002/07	B5244T	2.4	193		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> </ul> </li> </ul>

				<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>

VOLVO					C70 Coupe - C70 2.5 LPT Coupe	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> </ul> </li> </ul>	

1998/01 - 1999/07	B5254T	2.4	193	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>

VOLVO					
C70 Coupe - C70 2.5 20V Coupe					
Year	Engine	Liters	HP	System	Functions
1999/03 - 2000/07	B5254S	2.4	170	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> </ul>

					<ul style="list-style-type: none"> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
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**VOLVO C70 I Cabrio - C70 I 2.3 T5 Cabrio**

Year	Engine	Liters	HP	System	Functions
				Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> </ul> </li> </ul>

1998/08 - 2002/07	B5234T3	2.3	240	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> </ul>

				<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> <li>- Start test mode</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
1998/02 - 2002/07	B5234T3	2.3	240	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
			Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>



2002/08 - 2006/03	B5234T9	2.3	245	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> </ul> </li> </ul>

				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>

VOLVO					C70   Cabrio - C70   2.4 Cabrio	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> </ul> </li> </ul>	

1999/03 - 2000/07	B5244S	2.4	140 - 170	Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> <li>• <b>Actuators</b></li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul>
				Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> <li>• <b>Actuators</b></li> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> </ul>

					<ul style="list-style-type: none"> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>

VOLVO					C70 I Cabrio - C70 I 2.4 T Cabrio	
Year	Engine	Liters	HP	System	Functions	
				Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> </ul> </li> </ul>	

1999/08 - 2002/07	B5244T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
1998/08 - 1999/07	B5254T	2.4	193	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>

VOLVO					C70 I Cabrio - C70 I 2.0 T Cabrio	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> </ul>	

Gear box control  
5-gears automatic transmission 55-50/51SN1.0

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

Gear box control  
5-gears automatic transmission EGS 50-42  
CAN

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - kick-down switch
  - Engine revolution
  - Winter switch
  - Oil temperature sensor gear box
  - Engine status
  - Gear selection position
  - gear box oil temperature

<p>1999/08 - 2006/03</p>	<p>B5204T4</p>	<p>2.0</p>	<p>163</p>		<ul style="list-style-type: none"> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
<p>Central electronics Central electronics, front, 9.12.1</p>					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> </ul> </li> </ul>



				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
1998/03 - 1998/07	B5204T2	2.0	180	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
				Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> </ul> </li> </ul>

1998/08 - 2000/07	B5204T3	2.0	226		<ul style="list-style-type: none"> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>

VOLVO					C70 I Cabrio - C70 I 2.4 T5 Cabrio	
Year	Engine	Liters	HP	System	Functions	
				Gear box control 5-gears automatic transmission 55-50/51SN1.0	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> <p>• <b>Special functions</b></p> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> </ul>	

					<ul style="list-style-type: none"> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
<p>2002/08 - 2006/03</p>	<p>B5244T7</p>	<p>2.4</p>	<p>200</p>	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> </ul> </li> </ul>

				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>

VOLVO					C70 II - C70 II 2.4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> </ul> </li> </ul>	

Anti-block system  
ESP Teves Mk60

- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Passenger compartment temperature
  - Engine status
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Kilometer reading
  - Transmission skidding control
  - Brake exertion electrical distribution
  - Steering wheel rotational speed
  - Ambient temperature
  - Brake pedal travel
  - ABS control
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored steering angle sensor offset
  - Vehicle acceleration
  - Brake pressure sensor
  - Stored brake pressure sensor offset
  - ESP control
  - Yaw rate sensor, offset
  - Front left wheel acceleration
  - Front right wheel acceleration
  - Rear left wheel acceleration
  - Rear right wheel acceleration
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
  - Torque reduction request by ASR
  - Central electronics power supply
  - Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage

2006/03 - 2010/07	B5244S5	2.4	140	<p>Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> <li>- Driving speed</li> <li>- Gear lever AT position</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- stop lights switch</li> <li>- Winter switch</li> <li>- Passenger compartment temperature</li> <li>- Control unit power supply</li> <li>- Inserted gear</li> <li>- system power supply</li> <li>- Engine status</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gear box control error</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Direct transmission Converter lockup</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Torque limitation</li> <li>- Kilometer reading</li> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> <li>- Time within 140 - 150 °C</li> <li>- Time &gt; 150 °C</li> <li>- Press. regul. sol. valve 1 set value</li> <li>- Pressure regulator solenoid valve 1 actual value</li> <li>- Pressure regulator solenoid valve 2 set value</li> <li>- Pressure regulator solenoid valve 2 actual value</li> <li>- Set value, solenoid valve, torque conv. lock-up</li> <li>- Convertor bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b></li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
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			<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
			<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>

				Immobilizer Access system/immobilizer 2.0	<ul style="list-style-type: none"> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul>
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					C70 II - C70 II 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> </ul> </li> </ul>	



Anti-block system  
ESP Teves Mk60

- ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Passenger compartment temperature
  - Engine status
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Kilometer reading
  - Transmission skidding control
  - Brake exertion electrical distribution
  - Steering wheel rotational speed
  - Ambient temperature
  - Brake pedal travel
  - ABS control
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored steering angle sensor offset
  - Vehicle acceleration
  - Brake pressure sensor
  - Stored brake pressure sensor offset
  - ESP control
  - Yaw rate sensor, offset
  - Front left wheel acceleration
  - Front right wheel acceleration
  - Rear left wheel acceleration
  - Rear right wheel acceleration
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
  - Torque reduction request by ASR
  - Central electronics power supply
  - Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**

2006/03  
-  
2010/07

B5244S4

2.4

170

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1

				<ul style="list-style-type: none"> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
			Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
			Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> </ul>

				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO				C70 II - C70 II T5	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

Anti-block system  
ESP Teves Mk60

• **Functional tests**

- ABS test
- ASR test
- ESP test

• **Adjustments / settings**

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment

• **Longitudinal acceleration sensor zero position adaptation**

- Adaptation, steering wheel angle sensor

• **Special functions**

- Bleed

• **Error memory**

• **Current values**

- Longitudinal acceleration sensor
- Vehicle driving speed
- Battery voltage
- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode

2006/03  
-  
2007/07

B5254T3

2.5

220

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic
  - Geartronic -
  - Winter mode
  - Gear ratio actual value
  - Gear ratio set value
  - Start release by selector lever module
- **Actuators**
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3

				<ul style="list-style-type: none"> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
			Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
			Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

				<ul style="list-style-type: none"> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
			<p>Immobilizer Access system/immobilizer 2.0</p>	
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> </ul>



Anti-block system  
ESP Teves Mk60

• **Adjustments / settings**

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation

• **Special functions**

- Bleed

• **Error memory**

• **Current values**

- Longitudinal acceleration sensor
- Vehicle driving speed
- Battery voltage
- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position

2007/08 -	B5254T7	2.5	230	<p>Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- Gear lever AT position</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- stop lights switch</li> <li>- Winter switch</li> <li>- Passenger compartment temperature</li> <li>- Control unit power supply</li> <li>- Inserted gear</li> <li>- system power supply</li> <li>- Engine status</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gear box control error</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Direct transmission Converter lockup</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Torque limitation</li> <li>- Kilometer reading</li> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> <li>- Time within 140 - 150 °C</li> <li>- Time &gt; 150 °C</li> <li>- Press. regul. sol. valve 1 set value</li> <li>- Pressure regulator solenoid valve 1 actual value</li> <li>- Pressure regulator solenoid valve 2 set value</li> <li>- Pressure regulator solenoid valve 2 actual value</li> <li>- Set value, solenoid valve, torque conv. lock-up</li> <li>- Converter bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b></li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> </ul>
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					- Solenoid switch valve 5
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
				Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

				<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO				C70 II - C70 II D5	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk60

- ASR test
- ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Passenger compartment temperature
  - Engine status
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Kilometer reading
  - Transmission skidding control
  - Brake exertion electrical distribution
  - Steering wheel rotational speed
  - Ambient temperature
  - Brake pedal travel
  - ABS control
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored steering angle sensor offset
  - Vehicle acceleration
  - Brake pressure sensor
  - Stored brake pressure sensor offset
  - ESP control
  - Yaw rate sensor, offset
  - Front left wheel acceleration
  - Front right wheel acceleration
  - Rear left wheel acceleration
  - Rear right wheel acceleration
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
  - Torque reduction request by ASR
  - Central electronics power supply
  - Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**

2006/08  
-  
2010/07

D5244T8...

2.4

180

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual

pressure

- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module

• **Actuators**

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear

				<ul style="list-style-type: none"> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
			Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
			Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> </ul>

				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO				C70 II - C70 II 2.4D	
Year	Engine	Liters	HP	System	Functions
					• <b>Identification</b>



Anti-block system  
ESP Teves Mk60

- **Clear errors**
- **Functional tests**
  - ABS test
  - ASR test
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Passenger compartment temperature
  - Engine status
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Kilometer reading
  - Transmission skidding control
  - Brake exertion electrical distribution
  - Steering wheel rotational speed
  - Ambient temperature
  - Brake pedal travel
  - ABS control
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored steering angle sensor offset
  - Vehicle acceleration
  - Brake pressure sensor
  - Stored brake pressure sensor offset
  - ESP control
  - Yaw rate sensor, offset
  - Front left wheel acceleration
  - Front right wheel acceleration
  - Rear left wheel acceleration
  - Rear right wheel acceleration
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
  - Torque reduction request by ASR
  - Central electronics power supply
  - Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**

2006/08  
-  
2010/07

D5244T9

2.4

163

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Start gear indicator mode
- Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic
  - Geartronic -
  - Winter mode
  - Gear ratio actual value
  - Gear ratio set value
  - Start release by selector lever module
- **Actuators**
  - Solenoid switch valve 1
  - Solenoid switch valve 2

		<ul style="list-style-type: none"> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
	<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>

			<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> </ul> </li> </ul>

2008/01 - 2010/07	D4204T	2.0	136	Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul>
				Immobilizer Access system/immobilizer 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul>
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VOLVO					C70 II - C70 II D3	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk60 UDS	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- ESP switch</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul> </li> </ul>	
				Underbody/Steering	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> </ul> </li> </ul>	

2010/10 -	D5204T5	2.0	150	Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> </ul> </li> </ul>



				<ul style="list-style-type: none"> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
			Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO				C70 II - C70 II D4	
Year	Engine	Liters	HP	System	Functions
				Anti-block system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> </ul> </li> </ul>

ESP Teves Mk60 UDS

- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- ESP switch
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Power supply voltages
- Calculated front left brake temperature
- Calculated front right brake temperature
- Calculated rear left brake temperature
- Calculated rear right brake temperature
- Stored brake pressure sensor offset
- Steering angle offset

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current

2010/10 -	D5204T	2.0	177		<ul style="list-style-type: none"> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
				Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>

<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic
  - Geartronic -
  - Winter mode
  - Gear ratio actual value
  - Gear ratio set value
  - Start release by selector lever module

- 2010/07	B5244S4	2.4	170	<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
			Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul>
			Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Alternator voltage functional test</li> <li>• <b>Adjustments / settings</b></li> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> <li>• <b>Actuators</b></li> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> </ul>

				<ul style="list-style-type: none"> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul>
			<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>



Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic
  - Geartronic -
  - Winter mode
  - Gear ratio actual value

2003/12 - 2007/07	B5254T3	2.5	220	<ul style="list-style-type: none"> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
			Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
			Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul>
	<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
	<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
	<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

			<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> </ul> </li> </ul>

2007/08  
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B5254T7

2.5

230

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic
  - Geartronic -
  - Winter mode
  - Gear ratio actual value
  - Gear ratio set value
  - Start release by selector lever module
- **Actuators**

		<ul style="list-style-type: none"> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
	<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear window washer system</li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
				<p>Immobilizer Access system/immobilizer 2.0</p>	
				<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					S40 II - S40 II 2.0D	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> </ul> </li> </ul>	



Anti-block system  
ESP Teves Mk60

- ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Passenger compartment temperature
  - Engine status
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Kilometer reading
  - Transmission skidding control
  - Brake exertion electrical distribution
  - Steering wheel rotational speed
  - Ambient temperature
  - Brake pedal travel
  - ABS control
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored steering angle sensor offset
  - Vehicle acceleration
  - Brake pressure sensor
  - Stored brake pressure sensor offset
  - ESP control
  - Yaw rate sensor, offset
  - Front left wheel acceleration
  - Front right wheel acceleration
  - Rear left wheel acceleration
  - Rear right wheel acceleration
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
  - Torque reduction request by ASR
  - Central electronics power supply
  - Steering direction

Underbody/Steering  
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - control unit temperature
  - Power supply terminal 30
  - Steering wheel rotational speed
  - Engine status
  - Pump motor steering assistance
  - Power steering motor activation current

2004/01 - 2010/07	D4204T	2.0	136	Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				Immobilizer Access system/immobilizer 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk60

- rare right tire speed
- rear left tire speed
- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

Underbody/Steering  
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - control unit temperature
  - Power supply terminal 30
  - Steering wheel rotational speed
  - Engine status
  - Pump motor steering assistance
  - Power steering motor activation current
  - Power steering
  - Power steering motor activation
  - Power steering motor temperature
  - Speed-dependent power steering
  - Power steering motor specified speed
  - Power steering motor actual speed

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Basic adjustment, headlights auto adjustment
  - Reset undervoltage counter
  - Reset crash detection signal
  - Rear wiper with reverse gear
- **Error memory**

2004/04 - 2007/07	D4204T2	2.0	131	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> </ul> </li> </ul>

					- Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					S40 II - S40 II 1.6D DRIVE	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul>
2004/11 -	D4164T...	1.6	109 - 110	<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
			Immobilizer Access system/immobilizer 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>	
			Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>	

VOLVO					S40 II - S40 II 1.8	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> </ul> </li> </ul>	



Anti-block system  
ESP Teves Mk60

- ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Passenger compartment temperature
  - Engine status
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Kilometer reading
  - Transmission skidding control
  - Brake exertion electrical distribution
  - Steering wheel rotational speed
  - Ambient temperature
  - Brake pedal travel
  - ABS control
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored steering angle sensor offset
  - Vehicle acceleration
  - Brake pressure sensor
  - Stored brake pressure sensor offset
  - ESP control
  - Yaw rate sensor, offset
  - Front left wheel acceleration
  - Front right wheel acceleration
  - Rear left wheel acceleration
  - Rear right wheel acceleration
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
  - Torque reduction request by ASR
  - Central electronics power supply
  - Steering direction

Underbody/Steering  
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - control unit temperature
  - Power supply terminal 30
  - Steering wheel rotational speed
  - Engine status
  - Pump motor steering assistance
  - Power steering motor activation current

2004/04 - 2010/07	B4184S11	1.8	125	Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				Immobilizer Access system/immobilizer 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					S40 II - S40 II 1.6	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> </ul> </li> </ul>	

Anti-block system  
ESP Teves Mk60

- Vehicle driving speed
- Battery voltage
- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

Underbody/Steering  
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - control unit temperature
  - Power supply terminal 30
  - Steering wheel rotational speed
  - Engine status
  - Pump motor steering assistance
  - Power steering motor activation current
  - Power steering
  - Power steering motor activation
  - Power steering motor temperature
  - Speed-dependent power steering
  - Power steering motor specified speed
  - Power steering motor actual speed

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode

2004/11	B4164S3	1.6	101	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO S40 II - S40 II 2.5 T5 AWD					
Year	Engine	Liters	HP	System	Functions
				Anti-block system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> </ul> </li> </ul>

ESP Teves Mk60

- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1

2004/04 - 2007/07	B5254T3	2.5	220	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> <li>- modulating pressure: solenoid valve 2</li> <li>- Torque limitation</li> <li>- Kilometer reading</li> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> <li>- Time within 140 - 150 °C</li> <li>- Time &gt; 150 °C</li> <li>- Press. regul. sol. valve 1 set value</li> <li>- Pressure regulator solenoid valve 1 actual value</li> <li>- Pressure regulator solenoid valve 2 set value</li> <li>- Pressure regulator solenoid valve 2 actual value</li> <li>- Set value, solenoid valve, torque conv. lock-up</li> <li>- Converter bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b></li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> </ul>



Central electronics  
Central electronics, front, 9.12.1

- Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Basic adjustment, headlights auto adjustment
  - Reset undervoltage counter
  - Reset crash detection signal
  - Rear wiper with reverse gear
- **Error memory**
- **Current values**
  - Fuel pump relay
  - Power supply
  - Clutch switch
  - brake fluid level
  - Light switch
  - Back-up lights
  - Ignition key position
  - Main beam relay
  - Key code
  - Ignition key
  - Status Ignition lock
  - Windscreen washing water level
  - Front fog lights relay
  - Rear window wiper
  - Front windscreen wiper
  - Rear window froster relay
  - Vehicle power supply status
  - Headlight washer pump relay
  - Orientation light potentiometer
  - Rain sensor
  - Gas pedal position
  - Windshield washer relay
  - Rear window washer relay
- **Actuators**
  - Windshield washer system relay
  - Fog light
  - Headlights cleaning system
  - Relay for high-beam headlights
  - Rear window washer system

Immobilizer  
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adjustment: Unlocking options
- **Error memory**
- **Current values**
  - Power supply
  - Rear top unlocking switch
  - Brake pedal switch
  - Clutch pedal switch
  - Number of stored keys
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Remote control: Unlocking options
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Front left door handle button
  - Front right door handle button
  - Ignition lock activation
  - Rear right door handle button
  - Rear left door handle button
- **Actuators**
  - Unlock driver's door
  - Unlock front passenger's door
  - Unlock rear left door

				<ul style="list-style-type: none"> <li>- Lock rear left door</li> </ul>
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>
			<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> </ul> </li> </ul>

- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading

Gear box control

2007/08 - 2010/07	B5254T7	2.5	230	5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> <li>- Time within 140 - 150 °C</li> <li>- Time &gt; 150 °C</li> <li>- Press. regul. sol. valve 1 set value</li> <li>- Pressure regulator solenoid valve 1 actual value</li> <li>- Pressure regulator solenoid valve 2 set value</li> <li>- Pressure regulator solenoid valve 2 actual value</li> <li>- Set value, solenoid valve, torque conv. lock-up</li> <li>- Convertor bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b></li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Alternator voltage functional test</li> <li>• <b>Adjustments / settings</b></li> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> </ul>

Central electronics  
Central electronics, front, 9.12.1

- Reset undervoltage counter
- Reset crash detection signal
- Rear wiper with reverse gear
- **Error memory**
- **Current values**
  - Fuel pump relay
  - Power supply
  - Clutch switch
  - brake fluid level
  - Light switch
  - Back-up lights
  - Ignition key position
  - Main beam relay
  - Key code
  - Ignition key
  - Status Ignition lock
  - Windscreen washing water level
  - Front fog lights relay
  - Rear window wiper
  - Front windscreen wiper
  - Rear window froster relay
  - Vehicle power supply status
  - Headlight washer pump relay
  - Orientation light potentiometer
  - Rain sensor
  - Gas pedal position
  - Windshield washer relay
  - Rear window washer relay
- **Actuators**
  - Windshield washer system relay
  - Fog light
  - Headlights cleaning system
  - Relay for high-beam headlights
  - Rear window washer system

Immobilizer  
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adjustment: Unlocking options
- **Error memory**
- **Current values**
  - Power supply
  - Rear top unlocking switch
  - Brake pedal switch
  - Clutch pedal switch
  - Number of stored keys
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Remote control: Unlocking options
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Front left door handle button
  - Front right door handle button
  - Ignition lock activation
  - Rear right door handle button
  - Rear left door handle button
- **Actuators**
  - Unlock driver's door
  - Unlock front passenger's door
  - Unlock rear left door
  - Lock rear left door

- **Identification**
- **Adjustments / settings**

				<p>Electrical energy management Battery management 2.0</p> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>
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VOLVO					S40 II - S40 II D5	
Year	Engine	Liters	HP	System	Functions	
				<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> </ul> </li> </ul>	

- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

Gear box control  
5-gears automatic transmission 55-50/51SN2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed

2006/03  
-  
2010/07

D5244T8...

2.4

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Underbody/Steering  
Electro-hydraulic power steering 2.0

- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Vehicle driving speed
- Battery voltage
- control unit temperature
- Power supply terminal 30
- Steering wheel rotational speed
- Engine status
- Pump motor steering assistance
- Power steering motor activation current
- Power steering
- Power steering motor activation
- Power steering motor temperature
- Speed-dependent power steering
- Power steering motor specified speed
- Power steering motor actual speed

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Basic adjustment, headlights auto adjustment
- Reset undervoltage counter
- Reset crash detection signal
- Rear wiper with reverse gear
- **Error memory**



Central electronics  
Central electronics, front, 9.12.1

- **Current values**
  - Fuel pump relay
  - Power supply
  - Clutch switch
  - brake fluid level
  - Light switch
  - Back-up lights
  - Ignition key position
  - Main beam relay
  - Key code
  - Ignition key
  - Status Ignition lock
  - Windscreen washing water level
  - Front fog lights relay
  - Rear window wiper
  - Front windscreen wiper
  - Rear window froster relay
  - Vehicle power supply status
  - Headlight washer pump relay
  - Orientation light potentiometer
  - Rain sensor
  - Gas pedal position
  - Windshield washer relay
  - Rear window washer relay
- **Actuators**
  - Windshield washer system relay
  - Fog light
  - Headlights cleaning system
  - Relay for high-beam headlights
  - Rear window washer system

Immobilizer  
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adjustment: Unlocking options
- **Error memory**
- **Current values**
  - Power supply
  - Rear top unlocking switch
  - Brake pedal switch
  - Clutch pedal switch
  - Number of stored keys
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Remote control: Unlocking options
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Front left door handle button
  - Front right door handle button
  - Ignition lock activation
  - Rear right door handle button
  - Rear left door handle button
- **Actuators**
  - Unlock driver's door
  - Unlock front passenger's door
  - Unlock rear left door
  - Lock rear left door

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
  - Reset no-load current information
- **Current values**

			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul>
			<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor zero position adaptation <ul style="list-style-type: none"> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> </ul> </li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul>
	<p>Gear box control 5-gears automatic transmission 55-50/51 SN2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- Gear lever AT position</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- stop lights switch</li> <li>- Winter switch</li> <li>- Passenger compartment temperature</li> <li>- Control unit power supply</li> <li>- Inserted gear</li> <li>- system power supply</li> <li>- Engine status</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gear box control error</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Direct transmission Converter lockup</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Torque limitation</li> <li>- Kilometer reading</li> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> </ul> </li> </ul>

2006/04  
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2.4

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Underbody/Steering  
Electro-hydraulic power steering 2.0

Central electronics

- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - control unit temperature
  - Power supply terminal 30
  - Steering wheel rotational speed
  - Engine status
  - Pump motor steering assistance
  - Power steering motor activation current
  - Power steering
  - Power steering motor activation
  - Power steering motor temperature
  - Speed-dependent power steering
  - Power steering motor specified speed
  - Power steering motor actual speed

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Basic adjustment, headlights auto adjustment
  - Reset undervoltage counter
  - Reset crash detection signal
  - Rear wiper with reverse gear
- **Error memory**
- **Current values**
  - Fuel pump relay
  - Power supply
  - Clutch switch
  - brake fluid level
  - Light switch
  - Back-up lights
  - Ignition key position
  - Main beam relay
  - Key code

<p>Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul>
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VOLVO					S40 II - S40 II 1.8 F Flexifuel	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul>
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
2006/04 - 2010/07	B4184S8	1.8	125	Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
			<p>Immobilizer Access system/immobilizer 2.0</p>	
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>



Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic
  - Geartronic -
  - Winter mode
  - Gear ratio actual value
  - Gear ratio set value
  - Start release by selector lever module

-	B 5244 S4	2.4	170		<ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul>
			<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic
  - Geartronic -
  - Winter mode
  - Gear ratio actual value

2003/12 -	B 5254 T3	2.5	220		<ul style="list-style-type: none"> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
				Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul>
	<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
	<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
	<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>



VOLVO				S40 II - S40 II 2.4i	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic
  - Geartronic -

<p>2005/08 - 2010/07</p>	<p>B5244S7</p>	<p>2.4</p>	<p>170</p>		<ul style="list-style-type: none"> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
	<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
	<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> </ul> </li> </ul>

- Battery temperature
- Battery charging current

VOLVO				S40 II - S40 II 2.0	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul> </li> </ul>

2006/10 -	B4204S3	2.0	145	<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

				<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
			<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 2.0</p>	

VOLVO					S40 II - S40 II 2.0 F Flexifuel	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> </ul> </li> </ul>	

Anti-block system  
ESP Teves Mk60

- Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Passenger compartment temperature
  - Engine status
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Kilometer reading
  - Transmission skidding control
  - Brake exertion electrical distribution
  - Steering wheel rotational speed
  - Ambient temperature
  - Brake pedal travel
  - ABS control
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored steering angle sensor offset
  - Vehicle acceleration
  - Brake pressure sensor
  - Stored brake pressure sensor offset
  - ESP control
  - Yaw rate sensor, offset
  - Front left wheel acceleration
  - Front right wheel acceleration
  - Rear left wheel acceleration
  - Rear right wheel acceleration
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
  - Torque reduction request by ASR
  - Central electronics power supply
  - Steering direction

Underbody/Steering  
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - control unit temperature
  - Power supply terminal 30
  - Steering wheel rotational speed
  - Engine status
  - Pump motor steering assistance
  - Power steering motor activation current
  - Power steering
  - Power steering motor activation
  - Power steering motor temperature
  - Speed-dependent power steering
  - Power steering motor specified speed
  - Power steering motor actual speed



2009/08 -	B4204S4	2.0	146	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul>
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					S40 II - S40 II D2	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk60 UDS	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- ESP switch</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul>
				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
2011/08	D4162T	1.6	114	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> </ul> </li> </ul>

			<ul style="list-style-type: none"> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
		<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
		<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
		<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul>
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**VOLVO S40 II - S40 II D3**

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60 UDS	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- ESP switch</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul> </li> </ul>
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> </ul> </li> </ul>

2010/08 -	D5204T5	2.0	150	Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				Immobilizer Access system/immobilizer 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> <ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
			Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
			Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					S40 II - S40 II D4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> </ul> </li> </ul>	

				<p>Anti-block system ESP Teves Mk60 UDS</p>	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- ESP switch</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul>
				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
<p>2010/08 -</p>	<p>D5204T</p>	<p>2.0</p>	<p>177</p>	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> </ul> </li> </ul>



				<ul style="list-style-type: none"> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
		<p>Immobilizer Access system/immobilizer 2.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
		<p>Parking assisting system Park Distance Control 9.12.1</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> </ul> </li> </ul>

			Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul>
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VOLVO					S60 I - S60 I 2.3 T5	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>	

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position

- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay

<p>2000/11 - 2004/03</p>	<p>B5234T3</p>	<p>2.3</p>	<p>200 - 265</p>	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> <li>- Rear left window</li> <li>- Rear right window</li> <li>- Childproof lock relay</li> <li>- Main beam relay</li> <li>- Low-beam relay</li> <li>- Stand light relay</li> <li>- Relay, daytime running lights</li> <li>- Front left door status</li> <li>- Front right door status</li> <li>- Rear left door status</li> <li>- Rear right door status</li> <li>- Hatchback status</li> <li>- Front left door locking</li> <li>- Front right door locking</li> <li>- Rear left door locking</li> <li>- Rear right door locking</li> <li>- Airbag triggering signal</li> <li>- Alarm LED</li> <li>- Xenon lamp status</li> <li>- Transponder ID received</li> <li>- Immobilizer relay status</li> <li>- Key number</li> <li>- Number of authorized keys</li> <li>- Ignition switch illuminated ring</li> <li>- Light sensor</li> <li>- Ignition key</li> <li>- Windscreen washing water level</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Lights cleaning</li> <li>- Fog light switch</li> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> <li>- Front windscreen wiper</li> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Relay terminal 15</li> <li>- Windscreen wiper switch</li> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> </ul>
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• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper

Central electronics  
Central electronics 1.0

- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal

		<ul style="list-style-type: none"> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>



				<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
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VOLVO					S60 I - S60 I 2.4	
Year	Engine	Liters	HP	System	Functions	
				<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> </ul> </li> </ul>	

				<ul style="list-style-type: none"> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
		<p>Anti-block system ABS Teves Mk25 VER2</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> </ul> </li> </ul>

Gear box control  
5-gears automatic transmission 55-50/51SN1.0

- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Solenoid valve 1/2
- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module

• **Actuators**

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system

Central electronics  
Front central electronics 9.12.2

- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status
  - Key number
  - Number of authorized keys
  - Ignition switch illuminated ring
  - Light sensor
  - Ignition key
  - Windscreen washing water level
  - Emergency lights switch
  - Front fog lights relay
  - Lights cleaning

2000/11 - 2009/07	B5244S2	2.4	140	<ul style="list-style-type: none"> <li>- Fog light switch</li> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> <li>- Front windscreen wiper</li> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Relay terminal 15</li> <li>- Windscreen wiper switch</li> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
				• <b>Identification</b>

- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal

Central electronics  
Central electronics 1.0

- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating



		<ul style="list-style-type: none"> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
	<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>
			<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> </ul> </li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed

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Central electronics  
Front central electronics 9.12.2

- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status

- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment

- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

- **Error memory**

- **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys



- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed

		<ul style="list-style-type: none"> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
	Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

					<ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO					S60 I - S60 I 2.4 T	
Year	Engine	Liters	HP	System	Functions	
				<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> </ul> </li> </ul>	

		<ul style="list-style-type: none"> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> </ul> </li> </ul>

Gear box control  
5-gears automatic transmission 55-50/51SN1.0

- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper

2003/07

Central electronics  
Central electronics 1.0

- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal

- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

Steering wheel rotation angle sensor  
Steering angle sensor 1.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Power supply
- Battery voltage
- Driving wheels angle
- Steering angle sensor signal voltage A1
- Steering angle sensor signal voltage A2
- Status of LED circuit A
- Status of LED circuit B
- Status, steering angle sensor signal A1
- Status, steering angle sensor signal A2
- Status, steering angle sensor signal A3
- Status, steering angle sensor signal A4
- Status, steering angle sensor signal B1
- Status, steering angle sensor signal B2
- Status, steering angle sensor signal B3
- Status, steering angle sensor signal B4
- Current level LED circuit A
- Current level LED circuit B

				<p>Underbody/Steering Adap. suspension sys. 2.0</p> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
				<p>Instrument cluster Instrument cluster 1.0</p> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>



		<ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> </ul> </li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**

<p>2003/08 - 2006/07</p>	<p>B5244T4</p>	<p>2.4</p>	<p>180 - 220</p>	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> <li>- Rear left window</li> <li>- Rear right window</li> <li>- Childproof lock relay</li> <li>- Main beam relay</li> <li>- Low-beam relay</li> <li>- Stand light relay</li> <li>- Relay, daytime running lights</li> <li>- Front left door status</li> <li>- Front right door status</li> <li>- Rear left door status</li> <li>- Rear right door status</li> <li>- Hatchback status</li> <li>- Front left door locking</li> <li>- Front right door locking</li> <li>- Rear left door locking</li> <li>- Rear right door locking</li> <li>- Airbag triggering signal</li> <li>- Alarm LED</li> <li>- Xenon lamp status</li> <li>- Transponder ID received</li> <li>- Immobilizer relay status</li> <li>- Key number</li> <li>- Number of authorized keys</li> <li>- Ignition switch illuminated ring</li> <li>- Light sensor</li> <li>- Ignition key</li> <li>- Windscreen washing water level</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Lights cleaning</li> <li>- Fog light switch</li> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> </ul>
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- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status

Central electronics  
Central electronics 1.0

- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper
  - Fog light
  - rear left el. window lifter open
  - rear left el. window lifter closed

				<ul style="list-style-type: none"> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Sports mode LED</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO					S60 I - S60 I 2.0 T	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>	

		<ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> </ul> </li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2

Gear box control  
 5-gears automatic transmission 55-  
 50/51SN2.0

- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**

<p>2000/11 - 2009/07</p>	<p>B5204T5</p>	<p>2.0</p>	<p>179</p>	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> <li>- Rear left window</li> <li>- Rear right window</li> <li>- Childproof lock relay</li> <li>- Main beam relay</li> <li>- Low-beam relay</li> <li>- Stand light relay</li> <li>- Relay, daytime running lights</li> <li>- Front left door status</li> <li>- Front right door status</li> <li>- Rear left door status</li> <li>- Rear right door status</li> <li>- Hatchback status</li> <li>- Front left door locking</li> <li>- Front right door locking</li> <li>- Rear left door locking</li> <li>- Rear right door locking</li> <li>- Airbag triggering signal</li> <li>- Alarm LED</li> <li>- Xenon lamp status</li> <li>- Transponder ID received</li> <li>- Immobilizer relay status</li> <li>- Key number</li> <li>- Number of authorized keys</li> <li>- Ignition switch illuminated ring</li> <li>- Light sensor</li> <li>- Ignition key</li> <li>- Windscreen washing water level</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Lights cleaning</li> <li>- Fog light switch</li> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> </ul>
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- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status

Central electronics  
Central electronics 1.0

- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper
  - Fog light
  - rear left el. window lifter open
  - rear left el. window lifter closed



		<ul style="list-style-type: none"> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
	Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Sports mode LED</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO					S60 I - S60 I 2.4D	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>	

		<ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> </ul> </li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**

<p>2001/08 - 2006/07</p>	<p>D5244T</p>	<p>2.4</p>	<p>163</p>	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> <li>- Rear left window</li> <li>- Rear right window</li> <li>- Childproof lock relay</li> <li>- Main beam relay</li> <li>- Low-beam relay</li> <li>- Stand light relay</li> <li>- Relay, daytime running lights</li> <li>- Front left door status</li> <li>- Front right door status</li> <li>- Rear left door status</li> <li>- Rear right door status</li> <li>- Hatchback status</li> <li>- Front left door locking</li> <li>- Front right door locking</li> <li>- Rear left door locking</li> <li>- Rear right door locking</li> <li>- Airbag triggering signal</li> <li>- Alarm LED</li> <li>- Xenon lamp status</li> <li>- Transponder ID received</li> <li>- Immobilizer relay status</li> <li>- Key number</li> <li>- Number of authorized keys</li> <li>- Ignition switch illuminated ring</li> <li>- Light sensor</li> <li>- Ignition key</li> <li>- Windscreen washing water level</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Lights cleaning</li> <li>- Fog light switch</li> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> </ul>
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- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status



Central electronics  
Central electronics 1.0

- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper
  - Fog light
  - rear left el. window lifter open
  - rear left el. window lifter closed

				<ul style="list-style-type: none"> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Sports mode LED</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>
			<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> </ul> </li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50

2001/12 - 2006/07	D5244T2	2.4	130	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> <li>- Rear left window</li> <li>- Rear right window</li> <li>- Childproof lock relay</li> <li>- Main beam relay</li> <li>- Low-beam relay</li> <li>- Stand light relay</li> <li>- Relay, daytime running lights</li> <li>- Front left door status</li> <li>- Front right door status</li> <li>- Rear left door status</li> <li>- Rear right door status</li> <li>- Hatchback status</li> <li>- Front left door locking</li> <li>- Front right door locking</li> <li>- Rear left door locking</li> <li>- Rear right door locking</li> <li>- Airbag triggering signal</li> <li>- Alarm LED</li> <li>- Xenon lamp status</li> <li>- Transponder ID received</li> <li>- Immobilizer relay status</li> <li>- Key number</li> <li>- Number of authorized keys</li> <li>- Ignition switch illuminated ring</li> <li>- Light sensor</li> <li>- Ignition key</li> <li>- Windscreen washing water level</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Lights cleaning</li> <li>- Fog light switch</li> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> <li>- Front windscreen wiper</li> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> </ul>
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- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle



Central electronics  
Central electronics 1.0

- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status
  - Key number
  - Number of authorized keys
  - Ignition switch illuminated ring
  - Light sensor
  - Ignition key
  - Windscreen washing water level

- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light

					<ul style="list-style-type: none"> <li>- Rear daylight running light</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> </ul> </li> </ul>

			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>- Rear right damper valve 1</li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>
			<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASP/ESP control light</li> </ul>
		<p>Anti-block system ABS Teves Mk25 VER2</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> </ul> </li> </ul>

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Central electronics  
Front central electronics 9.12.2

- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch

				<ul style="list-style-type: none"> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
		Steering wheel rotation angle sensor Steering angle sensor 2.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> </ul>

				<p>Underbody/Steering Adap. suspension sys. 2.0</p> <ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> </ul> </li> </ul>



Instrument cluster  
Instrument cluster 1.0

- Kilometer reading
- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left

Gear box control  
 5-gears automatic transmission 55-  
 50/51SN1.0

- Pump motor
- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Convertor bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking

2003/08  
-  
2005/07

D5244T3

2.4

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Central electronics  
Front central electronics 9.12.2

- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock

- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay

Central electronics  
Central electronics 1.0

- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right

		<ul style="list-style-type: none"> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> </ul> </li> </ul>



				<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO					S60 I - S60 I 2.4 T AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> </ul> </li> </ul>	

Instrument cluster  
Instrument cluster 1.0

- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment

Central electronics  
Front central electronics 9.12.2

- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status
  - Key number
  - Number of authorized keys
  - Ignition switch illuminated ring
  - Light sensor
  - Ignition key
  - Windscreen washing water level
  - Emergency lights switch
  - Front fog lights relay
  - Lights cleaning
  - Fog light switch

<p>2001/11 - 2003/07</p>	<p>B5244T3</p>	<p>2.4</p>	<p>200</p>	<ul style="list-style-type: none"> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> <li>- Front windscreen wiper</li> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Relay terminal 15</li> <li>- Windscreen wiper switch</li> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>
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- **Functional tests**

- Alternator voltage functional test

- **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

- **Error memory**

- **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED

Central electronics  
Central electronics 1.0

- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper

				<ul style="list-style-type: none"> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>



Instrument cluster  
Instrument cluster 1.0

- **Clear errors**
- **Adjustments / settings**
  - Read configuration
  - Option display configuration
  - Service interval adaptation
  - Service interval display reset
  - Activate/deactivate belt warning
  - Parking brake warning tone
- **Error memory**
- **Current values**
  - Failure lamp
  - Engine revolution
  - Warning lights
  - Kilometer reading
  - Fuel level in the tank
  - Rear fog light
  - Cooling agent temperature motor
  - Airbag signal lamp
  - Cruise control, control light
  - Oil pressure control lamp
  - Generator lamp
  - Brakes control light
  - ABS control light
  - Hi-beam lights, control light
  - Trailer turn sign. indicators, warning light
  - Fuel level warning lamp
  - Glow control light
  - Vehicle speed signal
  - TCS/ESP OFF warning light
  - Airbag warning light, status
  - Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal

		<ul style="list-style-type: none"> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic
  - Geartronic -

- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window

2003/08  
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B5244T4

2.4

220

Central electronics  
Front central electronics 9.12.2

- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left

- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder

Central electronics  
Central electronics 1.0

- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status

			<ul style="list-style-type: none"> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>	
		<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>		<ul style="list-style-type: none"> <li><b>• Identification</b></li> <li><b>• Clear errors</b></li> <li><b>• Error memory</b></li> <li><b>• Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
		<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>		<ul style="list-style-type: none"> <li><b>• Identification</b></li> <li><b>• Clear errors</b></li> <li><b>• Error memory</b></li> <li><b>• Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul>
			Underbody/Steering Adap. suspension sys. 2.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO				S60 I - S60 I R AWD	
Year	Engine	Liters	HP	System	Functions
					• <b>Identification</b>

Instrument cluster  
Instrument cluster 1.0

- **Clear errors**
- **Adjustments / settings**
  - Read configuration
  - Option display configuration
  - Service interval adaptation
  - Service interval display reset
  - Activate/deactivate belt warning
  - Parking brake warning tone
- **Error memory**
- **Current values**
  - Failure lamp
  - Engine revolution
  - Warning lights
  - Kilometer reading
  - Fuel level in the tank
  - Rear fog light
  - Cooling agent temperature motor
  - Airbag signal lamp
  - Cruise control, control light
  - Oil pressure control lamp
  - Generator lamp
  - Brakes control light
  - ABS control light
  - Hi-beam lights, control light
  - Trailer turn sign. indicators, warning light
  - Fuel level warning lamp
  - Glow control light
  - Vehicle speed signal
  - TCS/ESP OFF warning light
  - Airbag warning light, status
  - Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal

Gear box control  
 5-gears automatic transmission 55-  
 50/51SN1.0

- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic
  - Geartronic -

- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window

2003/03  
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2007/07

B5254T4

2.5

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Central electronics  
Front central electronics 9.12.2

- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left

- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder

Central electronics  
Central electronics 1.0

- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status



		<ul style="list-style-type: none"> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul>
			Underbody/Steering Adap. suspension sys. 2.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO				S60 I - S60 I 2.5 T AWD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

Instrument cluster  
Instrument cluster 1.0

- **Adjustments / settings**
  - Read configuration
  - Option display configuration
  - Service interval adaptation
  - Service interval display reset
  - Activate/deactivate belt warning
  - Parking brake warning tone
- **Error memory**
- **Current values**
  - Failure lamp
  - Engine revolution
  - Warning lights
  - Kilometer reading
  - Fuel level in the tank
  - Rear fog light
  - Cooling agent temperature motor
  - Airbag signal lamp
  - Cruise control, control light
  - Oil pressure control lamp
  - Generator lamp
  - Brakes control light
  - ABS control light
  - Hi-beam lights, control light
  - Trailer turn sign. indicators, warning light
  - Fuel level warning lamp
  - Glow control light
  - Vehicle speed signal
  - TCS/ESP OFF warning light
  - Airbag warning light, status
  - Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature

		<ul style="list-style-type: none"> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

- **Special functions**

- Start gear indicator mode
- Start test mode

- **Error memory**

- **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode

- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module

• **Actuators**

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay

<p>2004/04 - 2009/07</p>	<p>B5254T2</p>	<p>2.5</p>	<p>209 - 210</p>	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> <li>- Main beam relay</li> <li>- Low-beam relay</li> <li>- Stand light relay</li> <li>- Relay, daytime running lights</li> <li>- Front left door status</li> <li>- Front right door status</li> <li>- Rear left door status</li> <li>- Rear right door status</li> <li>- Hatchback status</li> <li>- Front left door locking</li> <li>- Front right door locking</li> <li>- Rear left door locking</li> <li>- Rear right door locking</li> <li>- Airbag triggering signal</li> <li>- Alarm LED</li> <li>- Xenon lamp status</li> <li>- Transponder ID received</li> <li>- Immobilizer relay status</li> <li>- Key number</li> <li>- Number of authorized keys</li> <li>- Ignition switch illuminated ring</li> <li>- Light sensor</li> <li>- Ignition key</li> <li>- Windscreen washing water level</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Lights cleaning</li> <li>- Fog light switch</li> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> <li>- Front windscreen wiper</li> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Relay terminal 15</li> <li>- Windscreen wiper switch</li> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> </ul> </li> </ul>
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- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn



Central electronics  
Central electronics 1.0

- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status

		<ul style="list-style-type: none"> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul>
			Underbody/Steering Adap. suspension sys. 2.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO				S60 I - S60 I 2.5 T	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

Instrument cluster  
Instrument cluster 1.0

- **Adjustments / settings**
  - Read configuration
  - Option display configuration
  - Service interval adaptation
  - Service interval display reset
  - Activate/deactivate belt warning
  - Parking brake warning tone
- **Error memory**
- **Current values**
  - Failure lamp
  - Engine revolution
  - Warning lights
  - Kilometer reading
  - Fuel level in the tank
  - Rear fog light
  - Cooling agent temperature motor
  - Airbag signal lamp
  - Cruise control, control light
  - Oil pressure control lamp
  - Generator lamp
  - Brakes control light
  - ABS control light
  - Hi-beam lights, control light
  - Trailer turn sign. indicators, warning light
  - Fuel level warning lamp
  - Glow control light
  - Vehicle speed signal
  - TCS/ESP OFF warning light
  - Airbag warning light, status
  - Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature

		<ul style="list-style-type: none"> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

- **Special functions**

- Start gear indicator mode
- Start test mode

- **Error memory**

- **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode

	<ul style="list-style-type: none"> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> <li>- Rear left window</li> <li>- Rear right window</li> <li>- Childproof lock relay</li> </ul> </li> </ul>

2004/04 - 2009/07	B5254T2	2.5	209 - 210	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> <li>- Main beam relay</li> <li>- Low-beam relay</li> <li>- Stand light relay</li> <li>- Relay, daytime running lights</li> <li>- Front left door status</li> <li>- Front right door status</li> <li>- Rear left door status</li> <li>- Rear right door status</li> <li>- Hatchback status</li> <li>- Front left door locking</li> <li>- Front right door locking</li> <li>- Rear left door locking</li> <li>- Rear right door locking</li> <li>- Airbag triggering signal</li> <li>- Alarm LED</li> <li>- Xenon lamp status</li> <li>- Transponder ID received</li> <li>- Immobilizer relay status</li> <li>- Key number</li> <li>- Number of authorized keys</li> <li>- Ignition switch illuminated ring</li> <li>- Light sensor</li> <li>- Ignition key</li> <li>- Windscreen washing water level</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Lights cleaning</li> <li>- Fog light switch</li> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> <li>- Front windscreen wiper</li> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Relay terminal 15</li> <li>- Windscreen wiper switch</li> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> </ul> </li> </ul>
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- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn

Central electronics  
Central electronics 1.0

- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status

		<ul style="list-style-type: none"> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b></li> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> </ul>

					<ul style="list-style-type: none"> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul>
			Underbody/Steering Adap. suspension sys. 2.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO				S60 I - S60 I 2.4 T5	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

Instrument cluster  
Instrument cluster 1.0

- **Adjustments / settings**
  - Read configuration
  - Option display configuration
  - Service interval adaptation
  - Service interval display reset
  - Activate/deactivate belt warning
  - Parking brake warning tone
- **Error memory**
- **Current values**
  - Failure lamp
  - Engine revolution
  - Warning lights
  - Kilometer reading
  - Fuel level in the tank
  - Rear fog light
  - Cooling agent temperature motor
  - Airbag signal lamp
  - Cruise control, control light
  - Oil pressure control lamp
  - Generator lamp
  - Brakes control light
  - ABS control light
  - Hi-beam lights, control light
  - Trailer turn sign. indicators, warning light
  - Fuel level warning lamp
  - Glow control light
  - Vehicle speed signal
  - TCS/ESP OFF warning light
  - Airbag warning light, status
  - Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature

		<ul style="list-style-type: none"> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

- **Special functions**

- Start gear indicator mode
- Start test mode

- **Error memory**

- **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode

- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay



<p>2004/04 - 2009/07</p>	<p>B5244T5</p>	<p>2.4</p>	<p>260</p>	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> <li>- Main beam relay</li> <li>- Low-beam relay</li> <li>- Stand light relay</li> <li>- Relay, daytime running lights</li> <li>- Front left door status</li> <li>- Front right door status</li> <li>- Rear left door status</li> <li>- Rear right door status</li> <li>- Hatchback status</li> <li>- Front left door locking</li> <li>- Front right door locking</li> <li>- Rear left door locking</li> <li>- Rear right door locking</li> <li>- Airbag triggering signal</li> <li>- Alarm LED</li> <li>- Xenon lamp status</li> <li>- Transponder ID received</li> <li>- Immobilizer relay status</li> <li>- Key number</li> <li>- Number of authorized keys</li> <li>- Ignition switch illuminated ring</li> <li>- Light sensor</li> <li>- Ignition key</li> <li>- Windscreen washing water level</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Lights cleaning</li> <li>- Fog light switch</li> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> <li>- Front windscreen wiper</li> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Relay terminal 15</li> <li>- Windscreen wiper switch</li> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> </ul> </li> </ul>
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- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn

Central electronics  
Central electronics 1.0

- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status

			<ul style="list-style-type: none"> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>	
		<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
		<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul>
			Underbody/Steering Adap. suspension sys. 2.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO				S60 I - S60 I D5	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

Instrument cluster  
Instrument cluster 1.0

- **Adjustments / settings**
  - Read configuration
  - Option display configuration
  - Service interval adaptation
  - Service interval display reset
  - Activate/deactivate belt warning
  - Parking brake warning tone
- **Error memory**
- **Current values**
  - Failure lamp
  - Engine revolution
  - Warning lights
  - Kilometer reading
  - Fuel level in the tank
  - Rear fog light
  - Cooling agent temperature motor
  - Airbag signal lamp
  - Cruise control, control light
  - Oil pressure control lamp
  - Generator lamp
  - Brakes control light
  - ABS control light
  - Hi-beam lights, control light
  - Trailer turn sign. indicators, warning light
  - Fuel level warning lamp
  - Glow control light
  - Vehicle speed signal
  - TCS/ESP OFF warning light
  - Airbag warning light, status
  - Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature

- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

• **Actuators**

- Inlet valve: front right front right
- Inlet valve: front left front left
- Exhaust valve: front left front left
- Exhaust valve: front right front right
- Inlet valve: rear right
- Inlet valve: rear left
- Exhaust valve: rear right
- Exhaust valve: rear left
- Pump motor

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window

2005/08  
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2009/07

D5244T4

2.4

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Central electronics  
Front central electronics 9.12.2

- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right



		<ul style="list-style-type: none"> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
	<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO						S60 I - S60 I D					
Year	Engine	Liters	HP	System				Functions			
				<p>Instrument cluster Instrument cluster 1.0</p>				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> </ul> </li> </ul>			

		<ul style="list-style-type: none"> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> </ul> </li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup

2005/08 - 2009/07	D5244T7	2.4	126	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Torque limitation</li> <li>- Kilometer reading</li> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> <li>- Time within 140 - 150 °C</li> <li>- Time &gt; 150 °C</li> <li>- Press. regul. sol. valve 1 set value</li> <li>- Pressure regulator solenoid valve 1 actual value</li> <li>- Pressure regulator solenoid valve 2 set value</li> <li>- Pressure regulator solenoid valve 2 actual value</li> <li>- Set value, solenoid valve, torque conv. lock-up</li> <li>- Converter bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b></li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> </ul> </li> </ul>	

Central electronics  
Front central electronics 9.12.2

- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side

	<ul style="list-style-type: none"> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Relay terminal 15</li> <li>- Windscreen wiper switch</li> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Central electronics power supply</li> </ul>
			<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> </ul> </li> </ul>



Instrument cluster  
Instrument cluster 1.0

- Parking brake warning tone
- **Error memory**
- **Current values**
  - Failure lamp
  - Engine revolution
  - Warning lights
  - Kilometer reading
  - Fuel level in the tank
  - Rear fog light
  - Cooling agent temperature motor
  - Airbag signal lamp
  - Cruise control, control light
  - Oil pressure control lamp
  - Generator lamp
  - Brakes control light
  - ABS control light
  - Hi-beam lights, control light
  - Trailer turn sign. indicators, warning light
  - Fuel level warning lamp
  - Glow control light
  - Vehicle speed signal
  - TCS/ESP OFF warning light
  - Airbag warning light, status
  - Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left

				<ul style="list-style-type: none"> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul>
2005/08 - 2006/07	D5244T6	2.4	122	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> <li>- Rear left window</li> <li>- Rear right window</li> <li>- Childproof lock relay</li> <li>- Main beam relay</li> <li>- Low-beam relay</li> <li>- Stand light relay</li> <li>- Relay, daytime running lights</li> <li>- Front left door status</li> </ul> </li> </ul>

Central electronics  
Front central electronics 9.12.2

- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay

				<ul style="list-style-type: none"> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Anti-block system ABS Teves Mk25 VER2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
				Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
<p style="text-align: center;">Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- Gear lever AT position</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- stop lights switch</li> <li>- Winter switch</li> <li>- Passenger compartment temperature</li> <li>- Control unit power supply</li> <li>- Inserted gear</li> <li>- system power supply</li> <li>- Engine status</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gear box control error</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Direct transmission Converter lockup</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Torque limitation</li> <li>- Kilometer reading</li> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> </ul> </li> </ul>

- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A

2002/06 - 2008/07	B5244SG	2.4	140	Central electronics Front central electronics 9.12.2	<ul style="list-style-type: none"> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> <li>- Rear left window</li> <li>- Rear right window</li> <li>- Childproof lock relay</li> <li>- Main beam relay</li> <li>- Low-beam relay</li> <li>- Stand light relay</li> <li>- Relay, daytime running lights</li> <li>- Front left door status</li> <li>- Front right door status</li> <li>- Rear left door status</li> <li>- Rear right door status</li> <li>- Hatchback status</li> <li>- Front left door locking</li> <li>- Front right door locking</li> <li>- Rear left door locking</li> <li>- Rear right door locking</li> <li>- Airbag triggering signal</li> <li>- Alarm LED</li> <li>- Xenon lamp status</li> <li>- Transponder ID received</li> <li>- Immobilizer relay status</li> <li>- Key number</li> <li>- Number of authorized keys</li> <li>- Ignition switch illuminated ring</li> <li>- Light sensor</li> <li>- Ignition key</li> <li>- Windscreen washing water level</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Lights cleaning</li> <li>- Fog light switch</li> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> <li>- Front windscreen wiper</li> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Relay terminal 15</li> <li>- Windscreen wiper switch</li> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> </ul>
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	<ul style="list-style-type: none"> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act. current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> </ul> </li> </ul>

- Pump, hot water
- Combustion air blower PWM signal

VOLVO				S60 I - S60 I 2.4 Bi-Fuel LPG	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ABS Teves Mk25 VER2	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
				Gear box control	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> </ul> </li> </ul>

5-gears automatic transmission 55-50/51SN1.0

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Convertor bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50

2002/06  
-  
2008/07

B5244SG2

2.4

140

Central electronics  
Front central electronics 9.12.2

- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor

- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Power supply
- Battery voltage
- Driving wheels angle
- Steering angle sensor signal voltage A1
- Steering angle sensor signal voltage A2
- Status of LED circuit A
- Status of LED circuit B

Steering wheel rotation angle sensor

Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>
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<b>VOLVO</b>	<b>S60 II - S60 II 2.0T</b>
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Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> <li>front               <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> </ul> </li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> <li>side               <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

			<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> </ul> </li> </ul>
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Central electronics  
Central electronics 3.0

- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

		<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act. current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> </ul>

					<ul style="list-style-type: none"> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					S60 II - S60 II D3	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> </ul> </li> </ul>	

Airbag  
Airbag AB 10

- Resistance side airbag driver's side
  - Resistance side airbag front passenger's side
  - Resistance windowbag driver's side
  - Resistance windowbag passenger's side
  - Front passenger airbag control light
  - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
  - Seat belt lock switch front passenger seat
  - Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
  - Steering wheel
  - Seat belt lock switch 2 row center
  - Resistance pre-load device 2 row center
  - Resistance pretensioner driver side
  - Resistance pretensioner front passenger side
  - Resistance pre-load device 2 row left
  - Resistance pre-load device 2 row right
  - Resistance ZK1 front airbag driver's side
  - Resistance ZK2 front airbag driver's side
  - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
  - Seat belt lock switch 2 row right
  - 2nd row center belt buckle current
  - Passenger's airbag indicator lamp off
  - Passenger categorization
  - Deactivation switch AB BFS
  - Driver seat AB/lap belt tensioner
  - 2nd row, left belt buckle, current
  - 2nd row, right belt buckle, current
  - Airbag, passenger side
  - Safety belt detection 2 row
  - DS front belt tensioner IC resist.
  - PS front belt tensioner IC resist.

Anti-block system  
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration

		<ul style="list-style-type: none"> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> </ul> </li> </ul>



6-gears automatic transmission TF80SC

- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor
  - Parking brake, control light
  - Actuation counter
  - Left parking brake request

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				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> <li>- Time: Fourth last alarm triggering</li> <li>- Tank flap unlocking relay</li> <li>- Rear fog light relay</li> <li>- Windscreen washer system switch</li> </ul> </li> </ul> <p>Central electronics Central electronics 3.0</p>

- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch

Immobilizer  
Access system/immobilizer 3.0

- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontal) sensor output: rear left
  - Car level (horizontal) sensor output: rear right
  - Car level (horizontal) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature

				<ul style="list-style-type: none"> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
			<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> </ul> <ul style="list-style-type: none"> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> </ul> <p>side</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> </ul>

		<ul style="list-style-type: none"> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
	<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> </ul> </li> </ul>

<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> </ul> </li> </ul>

					- Pressure control magnetic valve 5
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
				Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
2012/08	D5204T7	2.0	136		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> </ul> </li> </ul>



Central electronics  
Central electronics 3.0

- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch

		<ul style="list-style-type: none"> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
		<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> </ul>

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> <li>front <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> </ul> </li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> <li>side <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**

			<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b></li> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
			<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul>

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
<p>2010/08 - 2011/07</p>	<p>D5244T10</p>	<p>2.4</p>	<p>205</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right



		<ul style="list-style-type: none"> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> </ul>

Airbag  
Airbag AB 10

- Status airbag front passenger's side
  - Steering wheel
  - Seat belt lock switch 2 row center
  - Resistance pre-load device 2 row center
  - Resistance pretensioner driver side
  - Resistance pretensioner front passenger side
  - Resistance pre-load device 2 row left
  - Resistance pre-load device 2 row right
  - Resistance ZK1 front airbag driver's side
  - Resistance ZK2 front airbag driver's side
  - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
  - Seat belt lock switch 2 row right
  - 2nd row center belt buckle current
  - Passenger's airbag indicator lamp off
  - Passenger categorization
  - Deactivation switch AB BFS
  - Driver seat AB/lap belt tensioner
  - 2nd row, left belt buckle, current
  - 2nd row, right belt buckle, current
  - Airbag, passenger side
  - Safety belt detection 2 row
  - DS front belt tensioner IC resist.
  - PS front belt tensioner IC resist.

Anti-block system  
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber

		<ul style="list-style-type: none"> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
			Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
			Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
2011/08	D5244T15	2.4	215	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Sun roof initialization
- Reset crash detection signal
- Rear wiper with reverse gear
- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA

Immobilizer  
Access system/immobilizer 3.0

- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject
- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Number of registered master keys
  - Number of registered slave keys
  - Front left door handle button
  - Front right door handle button

		<ul style="list-style-type: none"> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>



				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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VOLVO					S60 II - S60 II D5 AWD	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> </ul> <p>side</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> </ul>	

		<ul style="list-style-type: none"> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
	<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>

				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
2010/08 - 2011/07	D5244T10	2.4	205		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay

		<ul style="list-style-type: none"> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
		<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> </ul>

				<p>Underbody/Steering Adaptive damping system 3.0</p> <ul style="list-style-type: none"> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>

Airbag  
Airbag AB 10

- Vehicle driving speed
  - Battery voltage
  - Passenger compartment temperature
  - Kilometer reading
  - Voltage belt lock driver's side
  - Voltage belt lock front passenger's side
  - Longitudinal acceleration
  - Resistance side airbag driver's side
  - Resistance side airbag front passenger's side
  - Resistance windowbag driver's side
  - Resistance windowbag passenger's side
  - Front passenger airbag control light
  - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
  - Seat belt lock switch front passenger seat
  - Passeng. side airbag, deactivation switch,
- status
- Status airbag front passenger's side
  - Steering wheel
  - Seat belt lock switch 2 row center
  - Resistance pre-load device 2 row center
  - Resistance pretensioner driver side
  - Resistance pretensioner front passenger side
  - Resistance pre-load device 2 row left
  - Resistance pre-load device 2 row right
  - Resistance ZK1 front airbag driver's side
  - Resistance ZK2 front airbag driver's side
  - Resistance ZK1 front airbag front passenger's
- side
- Seat belt lock switch 2 row left
  - Seat belt lock switch 2 row right
  - 2nd row center belt buckle current
  - Passenger's airbag indicator lamp off
  - Passenger categorization
  - Deactivation switch AB BFS
  - Driver seat AB/lap belt tensioner
  - 2nd row, left belt buckle, current
  - 2nd row, right belt buckle, current
  - Airbag, passenger side
  - Safety belt detection 2 row
  - DS front belt tensioner IC resist.
  - PS front belt tensioner IC resist.

Anti-block system

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed



ESP Teves Mk25 E1

- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio

			<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
			<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li><b>• Identification</b></li> <li><b>• Clear errors</b></li> <li><b>• Error memory</b></li> <li><b>• Current values</b></li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
			<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li><b>• Identification</b></li> <li><b>• Clear errors</b></li> <li><b>• Functional tests</b></li> <li>- Release parking brake</li> <li>- Parking brake apply</li> <li><b>• Adjustments / settings</b></li> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> <li><b>• Error memory</b></li> <li><b>• Current values</b></li> <li>- Power supply</li> <li>- Actuations during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> </ul>

				<ul style="list-style-type: none"> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
2011/08 -	D5244T15	2.4	215	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

Immobilizer  
Access system/immobilizer 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Number of registered master keys
  - Number of registered slave keys
  - Front left door handle button
  - Front right door handle button
  - Rear right door handle button
  - Rear lid exterior antenna
  - Front interior antenna
  - Rear interior antenna
  - Rear left door handle button
  - Rear right antenna
  - Rear left antenna
  - Start/Stop button
  - Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontal) sensor output: rear left
  - Car level (horizontal) sensor output: rear right
  - Car level (horizontal) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act. current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				S60 II - S60 II T6 AWD	
Year	Engine	Liters	HP	System	Functions
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> </ul> </li> </ul>

- Resistance pretensioner driver side
- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side
- Seat belt lock switch 2 row left
- Seat belt lock switch 2 row right
- 2nd row center belt buckle current
- Passenger's airbag indicator lamp off
- Passenger categorization
- Deactivation switch AB BFS
- Driver seat AB/lap belt tensioner
- 2nd row, left belt buckle, current
- 2nd row, right belt buckle, current
- Airbag, passenger side
- Safety belt detection 2 row
- DS front belt tensioner IC resist.
- PS front belt tensioner IC resist.

Anti-block system  
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature

	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>- Rear right brake disc temperature</li> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
				Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
2010/08 -	B6304T4	3.0	305		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering

				<ul style="list-style-type: none"> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
		<p>Immobilizer Access system/immobilizer 3.0</p>		<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
				<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> </ul>

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> </ul> <p>side</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button

2010/11 -	B4164T3	1.6	150	<ul style="list-style-type: none"> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> </ul> </li> </ul>
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Central electronics  
Central electronics 3.0

- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light



					- Ignition key eject
				Immobilizer Access system/immobilizer 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
				Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> </ul> </li> </ul>

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				S60 II - S60 II T4	
Year	Engine	Liters	HP	System	Functions
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> </ul>

- Resistance pre-load device 2 row center
- Resistance pretensioner driver side
- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side
- Seat belt lock switch 2 row left
- Seat belt lock switch 2 row right
- 2nd row center belt buckle current
- Passenger's airbag indicator lamp off
- Passenger categorization
- Deactivation switch AB BFS
- Driver seat AB/lap belt tensioner
- 2nd row, left belt buckle, current
- 2nd row, right belt buckle, current
- Airbag, passenger side
- Safety belt detection 2 row
- DS front belt tensioner IC resist.
- PS front belt tensioner IC resist.

Anti-block system  
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature

				<ul style="list-style-type: none"> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
			Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
			Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode</li> </ul> </li> </ul>

2010/11  
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B4164T

1.6

180

Central electronics  
Central electronics 3.0

adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left

- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button

Immobilizer  
Access system/immobilizer 3.0

		<ul style="list-style-type: none"> <li>- Center interior antenna</li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
	<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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VOLVO					S60 II - S60 II T5	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> <li>front <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch,</li> </ul> </li> <li>status <ul style="list-style-type: none"> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's</li> </ul> </li> <li>side <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b></li> </ul>	



Anti-block system  
ESP Teves Mk25 E1

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
<p>2010/11 -</p>	<p>B4204T7</p>	<p>2.0</p>	<p>241</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay

		<ul style="list-style-type: none"> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					S60 II - S60 II DRIVE	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> </ul> </li> </ul>	

Airbag  
Airbag AB 10

- Resistance side airbag front passenger's side
  - Resistance windowbag driver's side
  - Resistance windowbag passenger's side
  - Front passenger airbag control light
  - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
  - Seat belt lock switch front passenger seat
  - Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
  - Steering wheel
  - Seat belt lock switch 2 row center
  - Resistance pre-load device 2 row center
  - Resistance pretensioner driver side
  - Resistance pretensioner front passenger side
  - Resistance pre-load device 2 row left
  - Resistance pre-load device 2 row right
  - Resistance ZK1 front airbag driver's side
  - Resistance ZK2 front airbag driver's side
  - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
  - Seat belt lock switch 2 row right
  - 2nd row center belt buckle current
  - Passenger's airbag indicator lamp off
  - Passenger categorization
  - Deactivation switch AB BFS
  - Driver seat AB/lap belt tensioner
  - 2nd row, left belt buckle, current
  - 2nd row, right belt buckle, current
  - Airbag, passenger side
  - Safety belt detection 2 row
  - DS front belt tensioner IC resist.
  - PS front belt tensioner IC resist.

Anti-block system  
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset

		<ul style="list-style-type: none"> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
2011/08	D 4162T	1.6	116	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> </ul> </li> </ul>



Central electronics  
Central electronics 3.0

- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights

				<ul style="list-style-type: none"> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
			<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> </ul> </li> </ul>

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supple./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					S60 II - S60 II T4F	
Year	Engine	Liters	HP	System	Functions	
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> <li>front <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> </ul> </li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> </ul>	

- Seat belt lock switch 2 row center
- Resistance pre-load device 2 row center
- Resistance pretensioner driver side
- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side
- Seat belt lock switch 2 row left
- Seat belt lock switch 2 row right
- 2nd row center belt buckle current
- Passenger's airbag indicator lamp off
- Passenger categorization
- Deactivation switch AB BFS
- Driver seat AB/lap belt tensioner
- 2nd row, left belt buckle, current
- 2nd row, right belt buckle, current
- Airbag, passenger side
- Safety belt detection 2 row
- DS front belt tensioner IC resist.
- PS front belt tensioner IC resist.

Anti-block system  
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature

	<ul style="list-style-type: none"> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>

2010/11

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Central electronics  
Central electronics 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
  - Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor

- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch

Immobilizer  
Access system/immobilizer 3.0

- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontality) sensor output: rear left
  - Car level (horizontality) sensor output: rear right
  - Car level (horizontality) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act. current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature
  - Auxiliary/supplementary heater operating time
  - Auxiliary/supplementary heater heating time
  - Electronic control unit power supply



					<ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					S60 II - S60 II 2.5T5	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch,</li> </ul> <p>status</p> <ul style="list-style-type: none"> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's</li> </ul> <p>side</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> </ul>	

			<ul style="list-style-type: none"> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
		<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> </ul> </li> </ul>

Electrical energy management  
Battery management 3.0

- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2

					<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
				Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
2011/08 - 2012/07	B5254T5	2.5	254		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

Central electronics  
Central electronics 3.0

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch

				<ul style="list-style-type: none"> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li><b>• Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> <li><b>• Identification</b></li> <li><b>• Clear errors</b></li> <li><b>• Error memory</b></li> <li><b>• Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li><b>• Identification</b></li> <li><b>• Clear errors</b></li> <li><b>• Error memory</b></li> </ul>

Underbody/Steering  
Adaptive damping system 3.0

• **Current values**

- Car level (horizontality) sensor output: rear left
- Car level (horizontality) sensor output: rear right
- Car level (horizontality) sensor output: front left
- Electronic control unit supply voltage
- Control unit, Voltage sensor 1
- Control unit, Voltage sensor 2
- Front left damper valve resistance
- Front right damper valve resistance
- Rear left damper valve resistance
- Rear right damper valve resistance
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve act. current
- Vehicle level sensor, front right
- Front left damper valve actuation
- Front right damper valve actuation
- Rear left damper valve actuation
- Rear right damper valve actuation
- Damper mode
- Front right acceleration sensor power supply
- Front left acceleration sensor power supply
- Rear left acceleration sensor power supply
- Front left damper status
- Front right damper status
- Rear left damper status
- Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Fuel warming up
- Total run
- Coolant temperature
- Battery voltage
- Passenger compartment temperature
- Starter
- Operating status
- Additional cooling fluid pump
- Glow plugs control
- Ambient temperature
- Auxiliary/supplementary heater operating time
- Auxiliary/supplementary heater heating time
- Electronic control unit power supply
- Glow plug
- Combustion air blower actuation
- Combustion air blower
- Supplem./auxiliary heater fuel pump
- Central electronics power supply

Parking assisting system  
Park Distance Control 3.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Power supply
- Reverse gear
- Trailer detection
- Distance, left front, outside
- Distance, left front, inside
- Distance, right front, inside
- Distance, right front, outside
- Vehicle drive status
- Rear left outer distance
- Rear left inner distance
- Rear right outer distance
- Rear right inner distance

				<ul style="list-style-type: none"> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
			Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> </ul> <p>side</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> </ul> </li> </ul>



Anti-block system  
ESP Teves Mk25 E1

- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position

Gear box control  
6-gears automatic transmission TF80SC

- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Power supply
- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2

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Parking brake  
Electrical parking brake 3.0

- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor
  - Parking brake, control light
  - Actuation counter
  - Left parking brake request
  - Right parking brake request
  - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
  - Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch

Central electronics  
Central electronics 3.0

- Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right

		<ul style="list-style-type: none"> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supple./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					S60 II - S60 II D4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side front</li> </ul> </li> </ul>	

Airbag  
Airbag AB 10

- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
- Steering wheel
- Seat belt lock switch 2 row center
- Resistance pre-load device 2 row center
- Resistance pretensioner driver side
- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset

Anti-block system  
ESP Teves Mk25 E1

		<ul style="list-style-type: none"> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> </ul> </li> </ul>



		<ul style="list-style-type: none"> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuations during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> </ul>

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Central electronics  
Central electronics 3.0

• **Adjustments / settings**

- Start mode
- Program sensor code (activator)
- Sun roof initialization
- Reset crash detection signal
- Rear wiper with reverse gear
- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights

- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right

Immobilizer

Access system/immobilizer 3.0	<ul style="list-style-type: none"> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
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VOLVO					S60 II - S60 II 2.0T4	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> </ul> <p>side</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> </ul>	

		<ul style="list-style-type: none"> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
	<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
2012/08	B5204T8	2.0	180		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> </ul> </li> </ul>



Central electronics  
Central electronics 3.0

- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering

		<ul style="list-style-type: none"> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
		<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> </ul>

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> </ul> <p>side</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- Vehicle driving speed
- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position

Gear box control  
6-gears automatic transmission TF80SC

- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Power supply
- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2

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Parking brake  
Electrical parking brake 3.0

- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor
  - Parking brake, control light
  - Actuation counter
  - Left parking brake request
  - Right parking brake request
  - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
  - Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch

Central electronics  
Central electronics 3.0

- Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right



	<ul style="list-style-type: none"> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					S70 - S70 2.4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> </ul> </li> </ul>	

1999/08 - 2000/07	B5244S	2.4	170	<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- Gear lever AT position</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- stop lights switch</li> <li>- Winter switch</li> <li>- Passenger compartment temperature</li> <li>- Control unit power supply</li> <li>- Inserted gear</li> <li>- system power supply</li> <li>- Engine status</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gear box control error</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> </ul> </li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Solenoid switch valve 5

Gear box control  
5-gears automatic transmission EGS 50-42  
CAN

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - kick-down switch
  - Engine revolution
  - Winter switch
  - Oil temperature sensor gear box
  - Engine status
  - Gear selection position
  - gear box oil temperature
  - Direct transmission Converter lockup

					<ul style="list-style-type: none"> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
1999/01 - 2000/07	B5244T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>

VOLVO					S70 - S70 2.4 AWD	
Year	Engine	Liters	HP	System	Functions	
					<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> <p>• <b>Special functions</b></p> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> </ul>	

1999/08 - 2000/07	B5244S	2.4	170	Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> <li>• <b>Actuators</b></li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul>
				Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul>

					<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
1999/01 - 2000/07	B5244T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> <li>• <b>Actuators</b></li> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>

VOLVO					
S70 - S70 2.0					
Year	Engine	Liters	HP	System	Functions
1997/01 - 1999/07	B5202 S	2.0	126	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> </ul>

					<ul style="list-style-type: none"> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
1997/01 - 1998/07	B 5204 S	2.0	143	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>

VOLVO					S70 - S70 2.5	
Year	Engine	Liters	HP	System	Functions	
					<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> </ul>	



1997/01 - 1999/07	B5252S	2.4	144	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
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VOLVO						S70 - S70 2.5 20V					
Year	Engine	Liters	HP	System	Functions						
1997/01 - 1999/07	B5254S	2.4	165	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>						

VOLVO						S70 - S70 2.3 T-5					
Year	Engine	Liters	HP	System	Functions						
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> </ul>						

1997/01 - 2000/07	B5234T3	2.3	240	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
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VOLVO S70 - S70 TDI					
Year	Engine	Liters	HP	System	Functions
1997/01 - 2000/07	D5252T	2.5	140	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> </ul> </li> </ul>

- Gear shift solenoid valve 2
- Modulation pressure, solenoid
- Switch solenoid valve SLU

VOLVO					S70 - S70 2.0 T	
Year	Engine	Liters	HP	System	Functions	
1998/08 - 2000/07	B 5204 T3	2.0	226	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>	
1997/01 - 1998/07	B5204T	2.0	210	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
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VOLVO					
S70 - S70 R 2.3 T					
Year	Engine	Liters	HP	System	Functions
1997/01 - 1998/07	B5234T4	2.3	250	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>

VOLVO					
S70 - S70 2.3					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> </ul> </li> </ul>

1997/01 - 1998/07	B5234T2	2.3	218	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
1997/01 - 1999/07	B5234S	2.3	163	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> </ul> </li> </ul>

1998/08 - 2000/07	B5234T7	2.3	190	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
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VOLVO					S70 - S70 2.5 T	
Year	Engine	Liters	HP	System	Functions	
1997/01 - 1999/07	B5254T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>	

Year	Engine	Liters	HP	System	Functions
1998/08 - 1999/07	B5254T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>

VOLVO					
S70 - S70 2.5 Bifuel					
Year	Engine	Liters	HP	System	Functions
1998/08 - 1999/07	GB5252S	2.4	144	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
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VOLVO					
S70 - S70 2.0 T 20V					
Year	Engine	Liters	HP	System	Functions
1998/08 - 2000/07	B5204T4	2.0	163	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>

VOLVO					
S70 - S70 R 2.3 T AWD					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> </ul> </li> </ul>



1997/01 - 1998/07	B5234T4	2.3	250	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
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VOLVO					S70 - S70 2.0 T AWD	
Year	Engine	Liters	HP	System	Functions	
1998/08 - 2000/07	B5204T3	2.0	226	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>	

VOLVO					S80 - S80 2.3i T	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>	

Instrument cluster  
Instrument cluster 1.0

- **Adjustments / settings**
  - Read configuration
  - Option display configuration
  - Service interval adaptation
  - Service interval display reset
  - Activate/deactivate belt warning
  - Parking brake warning tone
- **Error memory**
- **Current values**
  - Failure lamp
  - Engine revolution
  - Warning lights
  - Kilometer reading
  - Fuel level in the tank
  - Rear fog light
  - Cooling agent temperature motor
  - Airbag signal lamp
  - Cruise control, control light
  - Oil pressure control lamp
  - Generator lamp
  - Brakes control light
  - ABS control light
  - Hi-beam lights, control light
  - Trailer turn sign. indicators, warning light
  - Fuel level warning lamp
  - Glow control light
  - Vehicle speed signal
  - TCS/ESP OFF warning light
  - Airbag warning light, status
  - Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature

		<ul style="list-style-type: none"> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
	<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

- **Special functions**

- Start gear indicator mode
- Start test mode

- **Error memory**

- **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode

- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module

• **Actuators**

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay

2000/07

B5204

2.3

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Central electronics  
Front central electronics 9.12.2

- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right

- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn

Central electronics  
Central electronics 1.0

- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status



			<ul style="list-style-type: none"> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>	
		<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
		<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO				S80 I - S80 I 2.0T5	
Year	Engine	Liters	HP	System	Functions
				<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> </ul> </li> </ul>

1998/08 - 2000/07	B5204T3	2.0	226	<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
				<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

- **Functional tests**

- Alternator voltage functional test

- **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

- **Error memory**

- **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED

Central electronics  
Central electronics 1.0

- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper

					<ul style="list-style-type: none"> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>

VOLVO					S80 I - S80 I 2.9	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> </ul> </li> </ul>	

- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply



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Central electronics  
Central electronics 1.0

- Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status
  - Key number
  - Number of authorized keys
  - Ignition switch illuminated ring
  - Light sensor
  - Ignition key
  - Windscreen washing water level
  - Emergency lights switch
  - Front fog lights relay
  - Lights cleaning
  - Fog light switch
  - Indicator light, hazard warning lights system
  - Wiper
  - Front windscreen washer
  - Front windscreen wiper
  - Daytime driving light status
  - Fuel level left side
  - Fuel level right side
  - Status Generator
  - Ambient light sensor
  - Seat belt lock switch driver seat front
  - Seat belt lock switch front passenger seat
  - Relay terminal 15
  - Windscreen wiper switch
  - Electronic control unit power supply
  - One-touch turn signal indication
  - Rear fog lights switch
  - Airbag system status
  - Hood monitoring
  - Passenger side belt warning
  - Headlight range control warning signal
  - Immobilizer: Start authorization
  - Rear wiper actuation by reverse gear
  - Battery temperature
  - Glove box light
  - Undervoltage shutoff threshold
  - Selector lever lock status
  - Dipped beam status
  - Transponder code
  - Transponder signal
  - Wiper relay 2
  - Rear window washer relay
  - Infotainment relay
  - Continued operation of headlights
  - Relay 4 terminal 15
- **Actuators**

				<ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> </ul> </li> </ul>

Instrument cluster  
Instrument cluster 1.0

- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

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- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking

Central electronics  
Central electronics 1.0

- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock

				<ul style="list-style-type: none"> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
			<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
			<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> </ul>

			<ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
		<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> </ul> </li> </ul>

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Central electronics  
Central electronics 1.0

- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status
  - Key number
  - Number of authorized keys
  - Ignition switch illuminated ring
  - Light sensor
  - Ignition key
  - Windscreen washing water level
  - Emergency lights switch
  - Front fog lights relay
  - Lights cleaning
  - Fog light switch
  - Indicator light, hazard warning lights system



- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Error memory**

				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
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VOLVO					S80 I - S80 I 2.8 T6	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> <li>• <b>Actuators</b></li> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> </ul>	

		<ul style="list-style-type: none"> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> </ul> </li> </ul>

1998/05  
-  
2001/07

B6284 T

2.8

272

Central electronics  
Central electronics 1.0

- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch

	<ul style="list-style-type: none"> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
				<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>

1998/06 - 2001/07	B6284T	2.8	272	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> </ul> </li> </ul>

Central electronics  
Central electronics 1.0

- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2



				<ul style="list-style-type: none"> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

Instrument cluster  
Instrument cluster 1.0

- Failure lamp
- Engine revolution
- Warning lights
- Kilometer reading
- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right

- Inlet valve: rear right
- Inlet valve: rear left
- Exhaust valve: rear right
- Exhaust valve: rear left
- Pump motor

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status

Central electronics  
Front central electronics 9.12.2

- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights

<p>2001/08 - 2004/12</p>	<p>B6284T</p>	<p>2.8</p>	<p>272</p>	<ul style="list-style-type: none"> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> </ul> </li> </ul>				

Central electronics  
Central electronics 1.0

- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

				<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
		<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
		<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> </ul>

				<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>
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VOLVO					S80 I - S80 I 2.0T
Year	Engine	Liters	HP	System	Functions
				<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> </ul> </li> </ul>



		<ul style="list-style-type: none"> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> </ul>

1998/08 - 2000/07	B5204T4	2.0	163	<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> <li>- Rear left window</li> <li>- Rear right window</li> <li>- Childproof lock relay</li> <li>- Main beam relay</li> <li>- Low-beam relay</li> <li>- Stand light relay</li> <li>- Relay, daytime running lights</li> <li>- Front left door status</li> <li>- Front right door status</li> <li>- Rear left door status</li> </ul> </li> </ul>

Central electronics  
Central electronics 1.0

- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights

				<ul style="list-style-type: none"> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
			Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- Vehicle driving speed
- Accelerator pedal position
- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Solenoid valve 1/2
- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication

1999/08  
-  
2006/07

B5204T5

2.0

180

Central electronics  
Front central electronics 9.12.2

- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status
  - Key number
  - Number of authorized keys
  - Ignition switch illuminated ring
  - Light sensor
  - Ignition key
  - Windscreen washing water level
  - Emergency lights switch



- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking

Central electronics  
Central electronics 1.0

- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring

		<ul style="list-style-type: none"> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
	<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>

Anti-block system  
ABS Teves Mk25 VER2

- Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
- Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

Gear box control  
5-gears automatic transmission EGS 50-42  
CAN

- **Identification**
- **Clear errors**
- **Adjustments / settings**
- Adaptive parameters reset
  - Transm. oil change interval reset
- **Error memory**
- **Current values**
- Power supply
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - kick-down switch
  - Engine revolution
  - Winter switch
  - Oil temperature sensor gear box
  - Engine status
  - Gear selection position
  - gear box oil temperature
  - Direct transmission Converter lockup
  - Brake pedal switch
  - Gearbox input speed
  - Magnetic valve transmission oil pressure
  - Key switch position
  - Gearshift solenoid valve, status 1
  - Gearshift solenoid valve, status 2
  - Gearbox oil pressure – set value
  - Switch solenoid valve SLU
  - Solenoid shift valve SLU current
- **Actuators**
- Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Modulation pressure, solenoid
  - Switch solenoid valve SLU

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle

1998/08  
-  
2001/07

D5252T

2.5

140

Central electronics  
Central electronics 1.0

- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status
  - Key number
  - Number of authorized keys
  - Ignition switch illuminated ring
  - Light sensor
  - Ignition key
  - Windscreen washing water level

- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light



					- Rear daylight running light
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO					S80 I - S80 I 2.4 Bi-Fuel LPG	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> </ul> </li> </ul>	

Instrument cluster  
Instrument cluster 1.0

- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**

2001/08  
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• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED

Central electronics  
Front central electronics 9.12.2

- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper

- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay

Central electronics  
Central electronics 1.0

- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump



		<ul style="list-style-type: none"> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
	<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>
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VOLVO					S80 I - S80 I 2.4	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> </ul>	

Anti-block system  
ABS Teves Mk25 VER2

- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting

- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30

1998/08  
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2006/07

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Central electronics  
Front central electronics 9.12.2

- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature

- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control

Central electronics  
Central electronics 1.0

- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front



- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Power supply
- Battery voltage
- Driving wheels angle
- Steering angle sensor signal voltage A1
- Steering angle sensor signal voltage A2
- Status of LED circuit A
- Status of LED circuit B

Steering wheel rotation angle sensor  
Steering angle sensor 1.0

					<ul style="list-style-type: none"> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO					S80 I - S80 I 2.0 T	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> </ul> </li> </ul>	

Instrument cluster  
Instrument cluster 1.0

- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset

1998/08 - 2000/07	B5204T4	2.0	163	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>- Transm. oil change interval reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> </ul> </li> </ul>

Central electronics  
Central electronics 1.0

- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear

				<ul style="list-style-type: none"> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
			<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>

Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> </ul> </li> </ul>

Anti-block system  
ABS Teves Mk25 VER2

- Vehicle acceleration
- Front left wheel, speed signal
- Front right wheel, speed signal
- Rear right wheel, speed signal
- Rear left wheel, speed signal
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3



- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up

	<ul style="list-style-type: none"> <li>- Converter bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> </ul> </li> </ul>

2001/08  
-  
2006/07

D5244T

2.4

163

Central electronics  
Front central electronics 9.12.2

- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door

Central electronics  
Central electronics 1.0

- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization

		<ul style="list-style-type: none"> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO					
S80 I - S80 I 2.4 T4 Bi-Fuel CNG					
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Parking brake, control light</li> <li>• <b>Actuators</b></li> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- ABS test</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>• <b>Actuators</b></li> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> <li>• <b>Special functions</b></li> <li>- Start gear indicator mode</li> <li>- Start test mode</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> </ul>



Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- kick-down switch
- Solenoid valve 1/2
- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error

Gear box control  
 5-gears automatic transmission 55-50/51SN2.0

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear

2001/08  
-  
2006/07

B5244SG

2.4

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Central electronics  
Front central electronics 9.12.2

- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status
  - Key number
  - Number of authorized keys
  - Ignition switch illuminated ring
  - Light sensor
  - Ignition key
  - Windscreen washing water level
  - Emergency lights switch
  - Front fog lights relay
  - Lights cleaning
  - Fog light switch
  - Indicator light, hazard warning lights system

- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status

Central electronics  
Central electronics 1.0

- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper
  - Fog light

				<ul style="list-style-type: none"> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
				Anti-block system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> </ul> </li> </ul>



ABS Teves Mk25 VER2

- Front right wheel, speed signal
- Rear right wheel, speed signal
- Rear left wheel, speed signal
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear

- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module

• **Actuators**

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter

2001/10  
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2006/07

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Central electronics  
Front central electronics 9.12.2

- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left

- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification

Central electronics  
Central electronics 1.0

- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light

		<ul style="list-style-type: none"> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b></li> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul>
			Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO				S80 I - S80 I 3.0	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> </ul> </li> </ul>



		<ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> </ul>

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Central electronics  
Central electronics 1.0

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer

- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Power supply
- Battery voltage

				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO					S80 I - S80 I 3.0 T6	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> </ul> </li> </ul>	

Instrument cluster  
Instrument cluster 1.0

- Kilometer reading
- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left

- Pump motor

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode

- Seat heating adjustment

- Blower motor, run-on

- Reset undervoltage counter

- Reset crash detection signal

- Adjustment: Lighting on leaving vehicle

- Adjustment: One-touch turn signal indication

- Fuel tank cap locking

- Illumination system

- Daytime driving light adjustment

- Rear wiper with reverse gear

- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed

- Total run

- Contact switch

- Fuel pump relay

- start signal, terminal 50

- Cruise control

- Terminal 30

- Immobilizer

- engine control unit ignition blocking

- Terminal 15

- Start permission

- Output stage group A

- Output stage group B

- Function windscreen washing

- Function washing rear window washing

- End position windshield wiper

- Tank filling door

- Stationary heater/ventilation activation

- Supply voltage term.30

- Switch identification

- Vehicle model

- Transponder

- Signal horn

- Vehicle information (VIN)

- Transponder communication

- Generator, L-Signal

- Headlight level control signal

- Left xenon lamp signal

- Right xenon lamp signal

- Power supply relay

- Automatic transmission power supply

- Selector lever lock relay

- Relay starter

- Rear left window

- Rear right window

- Childproof lock relay

- Main beam relay

- Low-beam relay

- Stand light relay

- Relay, daytime running lights

- Front left door status

- Front right door status

- Rear left door status

- Rear right door status

- Hatchback status

- Front left door locking

- Front right door locking

Central electronics  
Front central electronics 9.12.2

- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn

2006/07	B6294T	2.9	272	<ul style="list-style-type: none"> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> <li>- Rear left window</li> </ul> </li> </ul>				



Central electronics  
Central electronics 1.0

- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right

		<ul style="list-style-type: none"> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> </ul> </li> </ul>

			Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>
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VOLVO				S80 I - S80 I 2.4T	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position

2000/08 - 2003/07	B5244T3	2.4	200	<ul style="list-style-type: none"> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> </ul> </li> </ul>

Central electronics  
Central electronics 1.0

- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

				<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> </ul>

Instrument cluster  
Instrument cluster 1.0

- Kilometer reading
- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left



		<ul style="list-style-type: none"> <li>- Pump motor</li> </ul>
	<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> </ul> </li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Convertor bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking

Central electronics  
Front central electronics 9.12.2

- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock

- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window

Central electronics  
Central electronics 1.0

- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left

		<ul style="list-style-type: none"> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> </ul> </li> </ul>

			Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>
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VOLVO				S80 I - S80 I 2.5 AWD	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>



Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position

Gear box control  
 5-gears automatic transmission 55-  
 50/51SN2.0

- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage

- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing

2003/08  
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2.5

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Central electronics  
Front central electronics 9.12.2

- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning

- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run

Central electronics  
Central electronics 1.0

- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side

- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Power supply
- Battery voltage
- Driving wheels angle

				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO					S80 I - S80 I 2.5	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> </ul> </li> </ul>	



Instrument cluster  
Instrument cluster 1.0

- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

• **Identification**

2003/08  
-  
2006/07

B5254T2

2.5

210

- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal

Central electronics  
Front central electronics 9.12.2

- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating

- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay

Central electronics  
Central electronics 1.0

- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump

		<ul style="list-style-type: none"> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
	<p>Additional heater</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> </ul> </li> </ul>



			Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>
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VOLVO				S80 I - S80 I 2.4T AWD	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

Anti-block system  
ABS Teves Mk25 VER2

- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5

				<ul style="list-style-type: none"> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
<p>2000/08 - 2003/07</p>	<p>B5244T3</p>	<p>2.4</p>	<p>200</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> </ul> </li> </ul>

Central electronics  
Central electronics 1.0

- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay

		<ul style="list-style-type: none"> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Glow plug actuation</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>
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<b>VOLVO</b>	<b>S80 I - S80 I 2.3R</b>
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Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> </ul> </li> </ul>

Anti-block system  
ABS Teves Mk25 VER2

- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- Brake pedal position sensor
- Voltage at CEM
- Vehicle acceleration
- Front left wheel, speed signal
- Front right wheel, speed signal
- Rear right wheel, speed signal
- Rear left wheel, speed signal
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value

		<ul style="list-style-type: none"> <li>- Brake CU signal, vehicle speed</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
	<p>Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- Gear lever AT position</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- stop lights switch</li> <li>- Winter switch</li> <li>- Passenger compartment temperature</li> <li>- Control unit power supply</li> <li>- Inserted gear</li> <li>- system power supply</li> <li>- Engine status</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gear box control error</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Direct transmission Converter lockup</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Torque limitation</li> <li>- Kilometer reading</li> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> </ul> </li> </ul>



- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder

2000/04  
-  
2005/07

B5234T7

2.3

200  
-  
265

Central electronics  
Front central electronics 9.12.2

- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status

- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15

Central electronics  
Central electronics 1.0

- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply

	<ul style="list-style-type: none"> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO				S80 II - S80 II D5	
Year	Engine	Liters	HP	System	Functions
				Anti-block system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> </ul> </li> </ul>

ESP Teves Mk25 E1

- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic

		<ul style="list-style-type: none"> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b></li> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Release parking brake</li> <li>- Parking brake apply</li> <li>• <b>Adjustments / settings</b></li> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> <li>• <b>Adjustments / settings</b></li> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> <li>• <b>Special functions</b></li> <li>- Tire monitoring system</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> </ul>



2006/03  
-  
2009/07

D5244T4

2.4

185

Central electronics  
Central electronics 3.0

- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering

				<ul style="list-style-type: none"> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Underbody/Steering Adaptive damping system 3.0</p>	
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
<p>2008/11 - 2011/07</p>	<p>D5244T10</p>	<p>2.4</p>	<p>205</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator

				<ul style="list-style-type: none"> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
			<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>



			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
<p>Electrical energy management Battery management 3.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> </ul> </li> </ul>

Gear box control  
6-gears automatic transmission TF80SC

- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Power supply
- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2
- **Error memory**
- **Current values**
- Power supply
- Actuators during vehicle operation
- Inclination sensor
- Parking brake button
- Left control motor, current input
- Right control motor, current input
- Parking brake status, left
- Parking brake status, right
- Clutch pedal position
- Rear outer friction pad wearout sensor

				<ul style="list-style-type: none"> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
2011/08	D5244T15	2.4	215	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> <li>- Time: Fourth last alarm triggering</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**

Immobilizer  
Access system/immobilizer 3.0

- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Number of registered master keys
  - Number of registered slave keys
  - Front left door handle button
  - Front right door handle button
  - Rear right door handle button
  - Rear lid exterior antenna
  - Front interior antenna
  - Rear interior antenna
  - Rear left door handle button
  - Rear right antenna
  - Rear left antenna
  - Start/Stop button
  - Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontal) sensor output: rear left
  - Car level (horizontal) sensor output: rear right
  - Car level (horizontal) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act. current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status

				Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				S80 II - S80 II 2.4D	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> </ul> </li> </ul>

- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve



		<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> </ul> </li> </ul>

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Central electronics  
Central electronics 3.0

- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light

		<ul style="list-style-type: none"> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act. current</li> <li>- Rear left damper valve act. current</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**

Gear box control  
6-gears automatic transmission TF80SC

- Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position

				<ul style="list-style-type: none"> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
<p>2009/08 - 2010/07</p>	<p>D5244T19</p>	<p>2.4</p>	<p>163</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

- **Identification**
- **Clear errors**



Immobilizer  
Access system/immobilizer 3.0

- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Number of registered master keys
  - Number of registered slave keys
  - Front left door handle button
  - Front right door handle button
  - Rear right door handle button
  - Rear lid exterior antenna
  - Front interior antenna
  - Rear interior antenna
  - Rear left door handle button
  - Rear right antenna
  - Rear left antenna
  - Start/Stop button
  - Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontal) sensor output: rear left
  - Car level (horizontal) sensor output: rear right
  - Car level (horizontal) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				S80 II - S80 II 2.5T	
Year	Engine	Liters	HP	System	Functions
				<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> </ul> </li> </ul>

- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2

		<ul style="list-style-type: none"> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> </ul> </li> </ul>

2006/03  
-  
2009/07

B5254T6

2.5

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Central electronics  
Central electronics 3.0

- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light

		<ul style="list-style-type: none"> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**



Gear box control  
6-gears automatic transmission TF80SC

- Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right

				<ul style="list-style-type: none"> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
2009/08 - 2012/07	B5254T10	2.5	231	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

• **Identification**

Immobilizer  
Access system/immobilizer 3.0

- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Number of registered master keys
  - Number of registered slave keys
  - Front left door handle button
  - Front right door handle button
  - Rear right door handle button
  - Rear lid exterior antenna
  - Front interior antenna
  - Rear interior antenna
  - Rear left door handle button
  - Rear right antenna
  - Rear left antenna
  - Start/Stop button
  - Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontal) sensor output: rear left
  - Car level (horizontal) sensor output: rear right
  - Car level (horizontal) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature

			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

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Central electronics  
Central electronics 3.0

- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
  - Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch



- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch

Immobilizer  
Access system/immobilizer 3.0

- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontal) sensor output: rear left
  - Car level (horizontal) sensor output: rear right
  - Car level (horizontal) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act. current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature
  - Auxiliary/supplementary heater operating time
  - Auxiliary/supplementary heater heating time
  - Electronic control unit power supply

					<ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					S80 II - S80 II 3.2	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> </ul> </li> </ul>	

		<ul style="list-style-type: none"> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Functional tests</b></p> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> <p><b>• Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuations during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
		<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Functional tests</b></p> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> <p><b>• Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> <p><b>• Special functions</b></p> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul>

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Central electronics  
Central electronics 3.0

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay

Immobilizer  
Access system/immobilizer 3.0

- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

**• Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

**• Identification**

**• Clear errors**

**• Error memory**

**• Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

**• Identification**

**• Clear errors**

Underbody/Steering  
Adaptive damping system 3.0

- **Error memory**
- **Current values**
  - Car level (horizontality) sensor output: rear left
  - Car level (horizontality) sensor output: rear right
  - Car level (horizontality) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature
  - Auxiliary/supplementary heater operating time
  - Auxiliary/supplementary heater heating time
  - Electronic control unit power supply
  - Glow plug
  - Combustion air blower actuation
  - Combustion air blower
  - Supplem./auxiliary heater fuel pump
  - Central electronics power supply

Parking assisting system  
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Reverse gear
  - Trailer detection
  - Distance, left front, outside
  - Distance, left front, inside
  - Distance, right front, inside
  - Distance, right front, outside
  - Vehicle drive status
  - Rear left outer distance
  - Rear left inner distance
  - Rear right outer distance



				<ul style="list-style-type: none"> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> </ul> </li> </ul>

-	B6324S5	3.2	243	<p>Central electronics Central electronics 3.0</p>	<ul style="list-style-type: none"> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> <li>- Time: Fourth last alarm triggering</li> <li>- Tank flap unlocking relay</li> <li>- Rear fog light relay</li> <li>- Windscreen washer system switch</li> <li>- Center stop lamp actuation</li> <li>- Fog light switch</li> <li>- Rain sensor</li> <li>- Wiper switch</li> <li>- Light sensor</li> <li>- Rear fog lights switch</li> <li>- Washer fluid level monitoring</li> <li>- Backup lights</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery voltage monitoring</li> <li>- Battery power consumption</li> <li>- Operating time in minutes</li> <li>- No-load current mean value</li> <li>- Age of the vehicle in days</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Clutch pedal position</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> </ul>
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				<ul style="list-style-type: none"> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
		<p>Immobilizer Access system/immobilizer 3.0</p>		<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
				<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> </ul>

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
				Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b></li> </ul>



<p>2006/08 - 2010/07</p>	<p>B6324S</p>	<p>3.2</p>	<p>238</p>	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left

		<ul style="list-style-type: none"> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear right damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> </ul> </li> </ul>

<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> </ul> </li> </ul>

Gear box control  
6-gears automatic transmission TF80SC

- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Power supply
- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2
- **Error memory**
- **Current values**
- Power supply
- Actuators during vehicle operation
- Inclination sensor
- Parking brake button
- Left control motor, current input

				<ul style="list-style-type: none"> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
2010/08	B6324S5	3.2	243	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light



	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>- Ignition key eject</li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> </ul> </li> </ul>

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					S80 II - S80 II T6 AWD	
Year	Engine	Liters	HP	System	Functions	
				<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> </ul> </li> </ul>	

		<ul style="list-style-type: none"> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> </ul> </li> </ul>

Gear box control  
6-gears automatic transmission TF80SC

- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor
  - Parking brake, control light
  - Actuation counter
  - Left parking brake request
  - Right parking brake request
  - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
  - Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal

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Central electronics  
Central electronics 3.0

- Rear wiper with reverse gear
- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA

				<ul style="list-style-type: none"> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery voltage monitoring</li> <li>- Battery power consumption</li> <li>- Operating time in minutes</li> <li>- No-load current mean value</li> <li>- Age of the vehicle in days</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Clutch pedal position</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
			<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> </ul>

		<ul style="list-style-type: none"> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

				<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> </ul>



Electrical energy management  
Battery management 3.0

• **Current values**

- Battery voltage
- Battery charging status
- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current

• **Actuators**

- Gear shift solenoid valve 1

		<ul style="list-style-type: none"> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> </ul>

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Central electronics  
Central electronics 3.0

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right

Immobilizer  
Access system/immobilizer 3.0

- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontal) sensor output: rear left
  - Car level (horizontal) sensor output: rear right
  - Car level (horizontal) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature
  - Auxiliary/supplementary heater operating time
  - Auxiliary/supplementary heater heating time
  - Electronic control unit power supply
  - Glow plug
  - Combustion air blower actuation
  - Combustion air blower
  - Supplem./auxiliary heater fuel pump
  - Central electronics power supply

Parking assisting system  
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Reverse gear
  - Trailer detection
  - Distance, left front, outside
  - Distance, left front, inside
  - Distance, right front, inside
  - Distance, right front, outside
  - Vehicle drive status
  - Rear left outer distance

					<ul style="list-style-type: none"> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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<b>VOLVO</b>				<b>S80 II - S80 II D5 AWD</b>	
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b></li> </ul>

Gear box control  
6-gears automatic transmission TF80SC

- Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position

				<ul style="list-style-type: none"> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
<p>2006/03 - 2009/07</p>	<p>D5244T4</p>	<p>2.4</p>	<p>185</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> </ul> </li> </ul>



Central electronics  
Central electronics 3.0

- Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

• **Identification**

Immobilizer  
Access system/immobilizer 3.0

- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Number of registered master keys
  - Number of registered slave keys
  - Front left door handle button
  - Front right door handle button
  - Rear right door handle button
  - Rear lid exterior antenna
  - Front interior antenna
  - Rear interior antenna
  - Rear left door handle button
  - Rear right antenna
  - Rear left antenna
  - Start/Stop button
  - Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontality) sensor output: rear left
  - Car level (horizontality) sensor output: rear right
  - Car level (horizontality) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act. current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature

			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> </ul> </li> </ul>

	<p>- Pressure control magnetic valve 5</p> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> </ul> </li> </ul>

2009/08  
-  
2011/07

D5244T10

2.4

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Central electronics  
Central electronics 3.0

- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4

				<ul style="list-style-type: none"> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
		<p>Underbody/Steering Adaptive damping system 3.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> </ul>



Anti-block system  
ESP Teves Mk25 E1

- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**

	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b></li> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Release parking brake</li> <li>- Parking brake apply</li> <li>• <b>Adjustments / settings</b></li> </ul>

2011/08	D5244T15	2.4	215	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left

		<ul style="list-style-type: none"> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> </ul> </li> </ul>

					- Rear right damper status
				Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supple./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					S80 II - S80 II 2.0B	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> </ul> </li> </ul>	

Anti-block system  
ESP Teves Mk25 E1

- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch

Gear box control  
6-gears automatic transmission TF80SC

- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2
- **Error memory**
- **Current values**
- Power supply
- Actuations during vehicle operation
- Inclination sensor
- Parking brake button
- Left control motor, current input
- Right control motor, current input
- Parking brake status, left
- Parking brake status, right
- Clutch pedal position
- Rear outer friction pad wearout sensor
- Parking brake, control light
- Actuation counter
- Left parking brake request
- Right parking brake request
- Status Handbrake



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Central electronics  
Central electronics 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
  - Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor

- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch

Immobilizer  
Access system/immobilizer 3.0

- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontal) sensor output: rear left
  - Car level (horizontal) sensor output: rear right
  - Car level (horizontal) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act. current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature
  - Auxiliary/supplementary heater operating time
  - Auxiliary/supplementary heater heating time
  - Electronic control unit power supply
  - Glow plug

					<ul style="list-style-type: none"> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					S80 II - S80 II 2.0 F Flexifuel	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> </ul> </li> </ul>	

		<ul style="list-style-type: none"> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b></li> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Release parking brake</li> <li>- Parking brake apply</li> <li>• <b>Adjustments / settings</b></li> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> <li>• <b>Adjustments / settings</b></li> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> <li>• <b>Special functions</b></li> </ul>

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Central electronics  
Central electronics 3.0

- Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position

		<ul style="list-style-type: none"> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
		<p><b>• Identification</b></p>



Underbody/Steering  
Adaptive damping system 3.0

- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontality) sensor output: rear left
  - Car level (horizontality) sensor output: rear right
  - Car level (horizontality) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature
  - Auxiliary/supplementary heater operating time
  - Auxiliary/supplementary heater heating time
  - Electronic control unit power supply
  - Glow plug
  - Combustion air blower actuation
  - Combustion air blower
  - Supplem./auxiliary heater fuel pump
  - Central electronics power supply

Parking assisting system  
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Reverse gear
  - Trailer detection
  - Distance, left front, outside
  - Distance, left front, inside
  - Distance, right front, inside
  - Distance, right front, outside
  - Vehicle drive status
  - Rear left outer distance
  - Rear left inner distance

- Rear right outer distance
- Rear right inner distance
- Distance sensors
- Front Park Distance Control
- Rear Park Distance Control

VOLVO					S80 II - S80 II 2.0D	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> </ul> </li> </ul>	

Electrical energy management  
Battery management 3.0

- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3

					<ul style="list-style-type: none"> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
2007/08 - 2010/07	D4204T	2.0	136		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4

				<ul style="list-style-type: none"> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
		<p>Underbody/Steering Adaptive damping system 3.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					S80 II - S80 II 2.5 FT Flexifuel	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> </ul> </li> </ul>	

		<ul style="list-style-type: none"> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> </ul> </li> </ul>



6-gears automatic transmission TF80SC

- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuations during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor
  - Parking brake, control light
  - Actuation counter
  - Left parking brake request
  - Right parking brake request
  - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
  - Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change

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Central electronics  
Central electronics 3.0

- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption

Immobilizer  
Access system/immobilizer 3.0

- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button

		<ul style="list-style-type: none"> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supple./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> </ul> </li> </ul>

				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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**VOLVO S80 II - S80 II 2.5 FT Fexifuel**

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> </ul> </li> </ul>

Electrical energy management  
Battery management 3.0

- Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**

		<ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> </ul> </li> </ul>

2009/08 - 2012/07	B5254T11	2.5	231	Central electronics Central electronics 3.0	<ul style="list-style-type: none"> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> <li>- Time: Fourth last alarm triggering</li> <li>- Tank flap unlocking relay</li> <li>- Rear fog light relay</li> <li>- Windscreen washer system switch</li> <li>- Center stop lamp actuation</li> <li>- Fog light switch</li> <li>- Rain sensor</li> <li>- Wiper switch</li> <li>- Light sensor</li> <li>- Rear fog lights switch</li> <li>- Washer fluid level monitoring</li> <li>- Backup lights</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery voltage monitoring</li> <li>- Battery power consumption</li> <li>- Operating time in minutes</li> <li>- No-load current mean value</li> <li>- Age of the vehicle in days</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Clutch pedal position</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> </ul>
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		<ul style="list-style-type: none"> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
		<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> </ul>

				Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					S80 II - S80 II T5	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> </ul>	

Anti-block system  
ESP Teves Mk25 E1

- ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

			<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
			<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> </ul> </li> </ul>

2010/08

B4204T7

2.0

240

Central electronics  
Central electronics 3.0

- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering

		<ul style="list-style-type: none"> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
		<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> </ul>

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
				Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> </ul> </li> </ul>



		<ul style="list-style-type: none"> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b></li> </ul>

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Central electronics  
Central electronics 3.0

- Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position

- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

Immobilizer  
Access system/immobilizer 3.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

• **Identification**

Underbody/Steering  
Adaptive damping system 3.0

- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontality) sensor output: rear left
  - Car level (horizontality) sensor output: rear right
  - Car level (horizontality) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature
  - Auxiliary/supplementary heater operating time
  - Auxiliary/supplementary heater heating time
  - Electronic control unit power supply
  - Glow plug
  - Combustion air blower actuation
  - Combustion air blower
  - Supplem./auxiliary heater fuel pump
  - Central electronics power supply

Parking assisting system  
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Reverse gear
  - Trailer detection
  - Distance, left front, outside
  - Distance, left front, inside
  - Distance, right front, inside
  - Distance, right front, outside
  - Vehicle drive status
  - Rear left outer distance
  - Rear left inner distance

					<ul style="list-style-type: none"> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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<b>VOLVO</b>	<b>S80 II - S80 II D3</b>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear left tire speed</li> <li>- rear right tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> </ul> </li> </ul>

Electrical energy management  
Battery management 3.0

- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3

				<ul style="list-style-type: none"> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
			Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
			Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>

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Central electronics  
Central electronics 3.0

- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch



				<ul style="list-style-type: none"> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
		<p>Immobilizer Access system/immobilizer 3.0</p>		<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
				<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> </ul>

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> </ul> </li> </ul>

			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>- Rear Park Distance Control</li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Underbody/Steering</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> </ul> </li> </ul>

2011/08 - 2012/07	D5204T3	2.0	163	<p>Electro hydraulic servo steering 3.0</p> <p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> </ul> </li> </ul>
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Central electronics  
Central electronics 3.0

- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status

		<ul style="list-style-type: none"> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
		<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> </ul>

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> </ul>



Anti-block system  
ESP Teves Mk25 E1

- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply

Underbody/Steering  
Electro hydraulic servo steering 3.0

- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor
  - Parking brake, control light
  - Actuation counter
  - Left parking brake request
  - Right parking brake request
  - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
  - Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light

2012/08

D5204T7

2.0

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Central electronics  
Central electronics 3.0

- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply

		<ul style="list-style-type: none"> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
		<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> </ul>

				<p>Underbody/Steering Adaptive damping system 3.0</p> <ul style="list-style-type: none"> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					S80 II - S80 II 3.0T	
Year	Engine	Liters	HP	System	Functions	

Anti-block system  
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value

- Battery status detection
- Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights

				<ul style="list-style-type: none"> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
			Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> </ul> </li> </ul>
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Central electronics  
Central electronics 3.0

- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status

		<ul style="list-style-type: none"> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> </ul> </li> </ul>

				Adaptive damping system 3.0	<ul style="list-style-type: none"> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				S80 II - S80 II T4F	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk25 E1

• **Adjustments / settings**

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation

• **Special functions**

- Bleed

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

• **Identification**

• **Adjustments / settings**

- Battery replacement
- Battery sensor adaptation reset

• **Current values**

- Battery voltage
- Battery charging status
- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

• **Identification**

<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> </ul> </li> </ul>

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Central electronics  
Central electronics 3.0

- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering

		<ul style="list-style-type: none"> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
		<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> </ul>

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>



Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
				Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>

				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> </ul> </li> </ul>
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Central electronics  
Central electronics 3.0

- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply

		<ul style="list-style-type: none"> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>- Ignition key eject</li> </ul> <p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
		<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> </ul>

				Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				S80 II - S80 II DRIVe	
Year	Engine	Liters	HP	System	Functions
					• <b>Identification</b>

Anti-block system  
ESP Teves Mk25 E1

- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection

					<ul style="list-style-type: none"> <li>- Battery charge/discharge current</li> </ul>
				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> </ul> </li> </ul>



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Central electronics  
Central electronics 3.0

- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch

<ul style="list-style-type: none"> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
<p>Immobilizer Access system/immobilizer 3.0</p> <p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> </ul>

Underbody/Steering  
Adaptive damping system 3.0

- Car level (horizontal) sensor output: rear right
- Car level (horizontal) sensor output: front left
- Electronic control unit supply voltage
- Control unit, Voltage sensor 1
- Control unit, Voltage sensor 2
- Front left damper valve resistance
- Front right damper valve resistance
- Rear left damper valve resistance
- Rear right damper valve resistance
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve act. current
- Vehicle level sensor, front right
- Front left damper valve actuation
- Front right damper valve actuation
- Rear left damper valve actuation
- Rear right damper valve actuation
- Damper mode
- Front right acceleration sensor power supply
- Front left acceleration sensor power supply
- Rear left acceleration sensor power supply
- Front left damper status
- Front right damper status
- Rear left damper status
- Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature
  - Auxiliary/supplementary heater operating time
  - Auxiliary/supplementary heater heating time
  - Electronic control unit power supply
  - Glow plug
  - Combustion air blower actuation
  - Combustion air blower
  - Supplem./auxiliary heater fuel pump
  - Central electronics power supply

Parking assisting system  
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Reverse gear
  - Trailer detection
  - Distance, left front, outside
  - Distance, left front, inside
  - Distance, right front, inside
  - Distance, right front, outside
  - Vehicle drive status
  - Rear left outer distance
  - Rear left inner distance
  - Rear right outer distance
  - Rear right inner distance
  - Distance sensors
  - Front Park Distance Control

VOLVO				S80 II - S80 II 1.6D DRIVE	
Year	Engine	Liters	HP	System	Functions
				Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
				Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> </ul> </li> </ul>

- Right parking brake request
- Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
  - Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch

Central electronics  
Central electronics 3.0

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- Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch

Immobilizer  
Access system/immobilizer 3.0

- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontal) sensor output: rear left
  - Car level (horizontal) sensor output: rear right
  - Car level (horizontal) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature

					<ul style="list-style-type: none"> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					S80 II - S80 II 2.0T	
Year	Engine	Liters	HP	System	Functions	
				Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>	



Gear box control  
6-gears automatic transmission TF80SC

- Accelerator pedal position
- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor
  - Parking brake, control light
  - Actuation counter

					<ul style="list-style-type: none"> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
2010/08	B4204T6	2.0	203	Central electronics	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> <li>- Time: Fourth last alarm triggering</li> <li>- Tank flap unlocking relay</li> <li>- Rear fog light relay</li> </ul> </li> </ul>

Central electronics 3.0

- Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**

Immobilizer  
Access system/immobilizer 3.0

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontal) sensor output: rear left
  - Car level (horizontal) sensor output: rear right
  - Car level (horizontal) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act. current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control

					<ul style="list-style-type: none"> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
			Parking assisting system Park Distance Control 3.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					S80 II - S80 II V8 AWD	
Year	Engine	Liters	HP	System	Functions	
				Gear box control 6-gears automatic transmission TF80SC	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> </ul> </li> </ul>	

		<ul style="list-style-type: none"> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuations during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode</li> </ul> </li> </ul>

				<p>Central electronics Central electronics 3.0</p>	<p>adaptation</p> <ul style="list-style-type: none"> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> <li>- Time: Fourth last alarm triggering</li> <li>- Tank flap unlocking relay</li> <li>- Rear fog light relay</li> <li>- Windscreen washer system switch</li> <li>- Center stop lamp actuation</li> <li>- Fog light switch</li> <li>- Rain sensor</li> <li>- Wiper switch</li> <li>- Light sensor</li> <li>- Rear fog lights switch</li> <li>- Washer fluid level monitoring</li> <li>- Backup lights</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery voltage monitoring</li> <li>- Battery power consumption</li> <li>- Operating time in minutes</li> <li>- No-load current mean value</li> <li>- Age of the vehicle in days</li> <li>- Sun sensor left</li> </ul> </li> </ul>
<p>2006/03 - 2010/12</p>	<p>B8444S</p>	<p>4.4</p>	<p>315</p>		

- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button

Immobilizer  
Access system/immobilizer 3.0



<p>Underbody/Steering Adaptive damping system 3.0</p>	<p>- Center interior antenna</p> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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<b>VOLVO</b>	<b>V40 CROSS COUNTRY - V40 1.6 T4 CROSS COUNTRY</b>
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Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> <li>front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> <li>side</li> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b></li> </ul>

Anti-block system  
ESP Teves Mk60 UDS

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Mileage
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - ESP switch
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Power supply voltages
  - Calculated front left brake temperature
  - Calculated front right brake temperature
  - Calculated rear left brake temperature
  - Calculated rear right brake temperature
  - Stored brake pressure sensor offset
  - Steering angle offset

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**

2013/01	B4164T	1.6	180	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights

					<ul style="list-style-type: none"> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
				<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

VOLVO					
V40 CROSS COUNTRY - V40 2.0 T5 CROSS COUNTRY					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> </ul> </li> </ul>

Airbag  
Airbag AB 10

- Voltage belt lock front passenger's side
  - Longitudinal acceleration
  - Resistance side airbag driver's side
  - Resistance side airbag front passenger's side
  - Resistance windowbag driver's side
  - Resistance windowbag passenger's side
  - Front passenger airbag control light
  - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
  - Seat belt lock switch front passenger seat
  - Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
  - Steering wheel
  - Seat belt lock switch 2 row center
  - Resistance pre-load device 2 row center
  - Resistance pretensioner driver side
  - Resistance pretensioner front passenger side
  - Resistance pre-load device 2 row left
  - Resistance pre-load device 2 row right
  - Resistance ZK1 front airbag driver's side
  - Resistance ZK2 front airbag driver's side
  - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
  - Seat belt lock switch 2 row right
  - 2nd row center belt buckle current
  - Passenger's airbag indicator lamp off
  - Passenger categorization
  - Deactivation switch AB BFS
  - Driver seat AB/lap belt tensioner
  - 2nd row, left belt buckle, current
  - 2nd row, right belt buckle, current
  - Airbag, passenger side
  - Safety belt detection 2 row
  - DS front belt tensioner IC resist.
  - PS front belt tensioner IC resist.

Anti-block system  
ESP Teves Mk60 UDS

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Mileage
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle

		<ul style="list-style-type: none"> <li>- ESP switch</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery</li> </ul> </li> </ul>



2013/01  
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B5204T9

2.0

214

Central electronics  
Central electronics 3.0

change

- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring

	<ul style="list-style-type: none"> <li>- Battery power consumption</li> <li>- Operating time in minutes</li> <li>- No-load current mean value</li> <li>- Age of the vehicle in days</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Clutch pedal position</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> </ul>

				<ul style="list-style-type: none"> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

VOLVO					V40 CROSS COUNTRY - V40 2.0 T5 AWD CROSS COUNTRY	
Year	Engine	Liters	HP	System	Functions	
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> </ul>	

		<ul style="list-style-type: none"> <li>- Resistance ZK1 front airbag front passenger's side</li> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
	<p>Anti-block system ESP Teves Mk60 UDS</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- ESP switch</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> </ul> </li> </ul>

				<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
<p>2013/01 -</p>	<p>B5204T9</p>	<p>2.0</p>	<p>214</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light

		<ul style="list-style-type: none"> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> </ul> </li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
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<b>VOLVO</b>	<b>V40 CROSS COUNTRY - V40 2.5 T5 CROSS COUNTRY</b>
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Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> <li>front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> <li>side</li> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> </ul> </li> </ul>



Anti-block system  
ESP Teves Mk60 UDS

- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Mileage
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - ESP switch
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Power supply voltages
  - Calculated front left brake temperature
  - Calculated front right brake temperature
  - Calculated rear left brake temperature
  - Calculated rear right brake temperature
  - Stored brake pressure sensor offset
  - Steering angle offset

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage

				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
<p>2013/01 -</p>	<p>B5254T12</p>	<p>2.5</p>	<p>254</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

				<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

VOLVO V40 CROSS COUNTRY - V40 2.5 T5 AWD CROSS COUNTRY					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> </ul> </li> </ul>

Airbag  
Airbag AB 10

- Resistance side airbag driver's side
  - Resistance side airbag front passenger's side
  - Resistance windowbag driver's side
  - Resistance windowbag passenger's side
  - Front passenger airbag control light
  - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
  - Seat belt lock switch front passenger seat
  - Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
  - Steering wheel
  - Seat belt lock switch 2 row center
  - Resistance pre-load device 2 row center
  - Resistance pretensioner driver side
  - Resistance pretensioner front passenger side
  - Resistance pre-load device 2 row left
  - Resistance pre-load device 2 row right
  - Resistance ZK1 front airbag driver's side
  - Resistance ZK2 front airbag driver's side
  - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
  - Seat belt lock switch 2 row right
  - 2nd row center belt buckle current
  - Passenger's airbag indicator lamp off
  - Passenger categorization
  - Deactivation switch AB BFS
  - Driver seat AB/lap belt tensioner
  - 2nd row, left belt buckle, current
  - 2nd row, right belt buckle, current
  - Airbag, passenger side
  - Safety belt detection 2 row
  - DS front belt tensioner IC resist.
  - PS front belt tensioner IC resist.

Anti-block system  
ESP Teves Mk60 UDS

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Mileage
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - ESP switch
  - Yaw rate sensor offset

		<ul style="list-style-type: none"> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after</li> </ul> </li> </ul>

2013/01  
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B5254T12

2.5

254

Central electronics  
Central electronics 3.0

battery change

- Read out alarm sources
- Instrument cluster illumination day/night mode

adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes

Immobilizer  
Access system/immobilizer 3.0

- No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Number of registered master keys
  - Number of registered slave keys
  - Front left door handle button
  - Front right door handle button
  - Rear right door handle button
  - Rear lid exterior antenna
  - Front interior antenna
  - Rear interior antenna
  - Rear left door handle button



					<ul style="list-style-type: none"> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

VOLVO					
V40 CROSS COUNTRY - V40 1.6 D2 CROSS COUNTRY					
Year	Engine	Liters	HP	System	Functions
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> </ul> <p>side</p>

		<ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
	<p>Anti-block system ESP Teves Mk60 UDS</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- ESP switch</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> </ul> </li> </ul>

2013/01 -	D4162T	1.6	114	Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1

		<ul style="list-style-type: none"> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> </ul> </li> </ul>

- Combustion air blower actuation
- Combustion air blower
- Supplem./auxiliary heater fuel pump
- Central electronics power supply

**VOLVO V40 CROSS COUNTRY - V40 2.0 D3 CROSS COUNTRY**

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk60 UDS

- adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Mileage
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - ESP switch
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Power supply voltages
  - Calculated front left brake temperature
  - Calculated front right brake temperature
  - Calculated rear left brake temperature
  - Calculated rear right brake temperature
  - Stored brake pressure sensor offset
  - Steering angle offset

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

Underbody/Steering

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights

2013/01 -	D5204T6	2.0	150	Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> </ul> </li> </ul>



Central electronics  
Central electronics 3.0

- Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

• **Identification**

				<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
			<p>Immobilizer Access system/immobilizer 3.0</p>	
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supple./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

VOLVO					V40 CROSS COUNTRY - V40 2.0 D4 CROSS COUNTRY	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> </ul> </li> </ul>	

Airbag  
Airbag AB 10

- Resistance side airbag front passenger's side
  - Resistance windowbag driver's side
  - Resistance windowbag passenger's side
  - Front passenger airbag control light
  - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
  - Seat belt lock switch front passenger seat
  - Passeng. side airbag, deactivation switch,
- status
- Status airbag front passenger's side
  - Steering wheel
  - Seat belt lock switch 2 row center
  - Resistance pre-load device 2 row center
  - Resistance pretensioner driver side
  - Resistance pretensioner front passenger side
  - Resistance pre-load device 2 row left
  - Resistance pre-load device 2 row right
  - Resistance ZK1 front airbag driver's side
  - Resistance ZK2 front airbag driver's side
  - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
  - Seat belt lock switch 2 row right
  - 2nd row center belt buckle current
  - Passenger's airbag indicator lamp off
  - Passenger categorization
  - Deactivation switch AB BFS
  - Driver seat AB/lap belt tensioner
  - 2nd row, left belt buckle, current
  - 2nd row, right belt buckle, current
  - Airbag, passenger side
  - Safety belt detection 2 row
  - DS front belt tensioner IC resist.
  - PS front belt tensioner IC resist.

Anti-block system  
ESP Teves Mk60 UDS

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
    - Longitudinal acceleration sensor zero position adaptation
    - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Mileage
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - ESP switch
  - Yaw rate sensor offset
  - Brake pressure sensor offset

		<ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> </ul> </li> </ul>

2013/01

D5204T4

2.0

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Central electronics  
Central electronics 3.0

- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value

- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna

Immobilizer  
Access system/immobilizer 3.0

					<ul style="list-style-type: none"> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

VOLVO					
V40 CROSS COUNTRY - V40 2.0 T4 CROSS COUNTRY					
Year	Engine	Liters	HP	System	Functions
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> </ul> <p>side</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> </ul>

				<ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
		<p>Anti-block system ESP Teves Mk60 UDS</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- ESP switch</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> </ul> </li> </ul>



2013/01 -	B5204T8	2.0	180	Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3

		<ul style="list-style-type: none"> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> </ul> </li> </ul>

- Supplem./auxiliary heater fuel pump
- Central electronics power supply

VOLVO				V40 I - V40 I T4	
Year	Engine	Liters	HP	System	Functions
2002/09 - 2004/08	B4204T4	1.9	172	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- Gear lever AT position</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- stop lights switch</li> <li>- Winter switch</li> <li>- Passenger compartment temperature</li> <li>- Control unit power supply</li> <li>- Inserted gear</li> <li>- system power supply</li> <li>- Engine status</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gear box control error</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Direct transmission Converter lockup</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Torque limitation</li> <li>- Kilometer reading</li> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> <li>- Time within 140 - 150 °C</li> <li>- Time &gt; 150 °C</li> <li>- Press. regul. sol. valve 1 set value</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Pressure regulator solenoid valve 1 actual value</li> <li>- Pressure regulator solenoid valve 2 set value</li> <li>- Pressure regulator solenoid valve 2 actual value</li> <li>- Set value, solenoid valve, torque conv. lock-up</li> <li>- Converter bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
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VOLVO					V40 I - V40 I 1.8 16V	
Year	Engine	Liters	HP	System	Functions	
1997/08 - 2000/07	B4184SM	1.8	125	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> </ul>	

1995/01 - 1999/07	B4184S	1.8	115	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
1999/08 - 2004/04	B4184S2	1.8	122	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> </ul>

2000/08 - 2004/04	B4184SJ	1.8	122	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
1999/04 - 2004/06	B4184S10	1.8	122	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>

VOLVO					V40 I - V40 I 2.0	
Year	Engine	Liters	HP	System	Functions	
1996/01 - 1999/07	B4204S	2.0	140	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>	

VOLVO					V40 I - V40 I 1.6 16V	
Year	Engine	Liters	HP	System	Functions	
1997/01 - 1999/07	B4164S	1.6	105	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> </ul> </li> </ul>	



					<ul style="list-style-type: none"> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
1999/08 - 2004/04	B4164S2	1.6	109	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>

VOLVO						V40 I - V40 I 1.9 T4					
Year	Engine	Liters	HP	System	Functions						
1997/05 -	B4194T	1.9	200	Gear box control 5-gears automatic transmission EGS 50-42	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> </ul>						

1999/07				CAN	<ul style="list-style-type: none"> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
1999/08 - 2000/07	B4194T2	1.9	200	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> </ul> </li> </ul>

2000/08 - 2002/12	B4194T2	1.9	200	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
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VOLVO					
V40 I - V40 I 2.0 16V T					
Year	Engine	Liters	HP	System	Functions
1998/04 - 1999/07	B4204T	2.0	160	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> </ul> </li> </ul>

1999/08 - 2000/07	B4204T2	1.9	160	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
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VOLVO					V40 I - V40 I 2.0 T
Year	Engine	Liters	HP	System	Functions
2001/08 - 2004/04	B4204T3	1.9	163	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

2000/08 - 2001/07	B4204T3	2.0	165	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
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VOLVO V40 I - V40 I 2.0 T4					
Year	Engine	Liters	HP	System	Functions
2000/08 - 2004/04	B4204T5	2.0	200	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

					<ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
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VOLVO					
V40 I - V40 I 2.0 16V					
Year	Engine	Liters	HP	System	Functions
1999/08 - 2004/04	B4204S2	2.0	136	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>

VOLVO					
V40 II - V40 II T3					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul>

Airbag  
Airbag AB 10

front

- Seat belt lock switch driver seat front
  - Seat belt lock switch front passenger seat
  - Passeng. side airbag, deactivation switch, status
  - Status airbag front passenger's side
  - Steering wheel
  - Seat belt lock switch 2 row center
  - Resistance pre-load device 2 row center
  - Resistance pretensioner driver side
  - Resistance pretensioner front passenger side
  - Resistance pre-load device 2 row left
  - Resistance pre-load device 2 row right
  - Resistance ZK1 front airbag driver's side
  - Resistance ZK2 front airbag driver's side
  - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
  - Seat belt lock switch 2 row right
  - 2nd row center belt buckle current
  - Passenger's airbag indicator lamp off
  - Passenger categorization
  - Deactivation switch AB BFS
  - Driver seat AB/lap belt tensioner
  - 2nd row, left belt buckle, current
  - 2nd row, right belt buckle, current
  - Airbag, passenger side
  - Safety belt detection 2 row
  - DS front belt tensioner IC resist.
  - PS front belt tensioner IC resist.

Anti-block system  
ESP Teves Mk60 UDS

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Mileage
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - ESP switch
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset

		<ul style="list-style-type: none"> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul>
	Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> </ul>



2012/03  
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B4164T3  
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150

Central electronics  
Central electronics 3.0

- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay

Immobilizer  
Access system/immobilizer 3.0

- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

**• Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

**• Identification**

**• Clear errors**

**• Error memory**

**• Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

**• Identification**

**• Clear errors**

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
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VOLVO					V40 II - V40 II T4	
Year	Engine	Liters	HP	System	Functions	
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch,</li> </ul> <p>status</p> <ul style="list-style-type: none"> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> </ul> <p>side</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> </ul>	

			<ul style="list-style-type: none"> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
		<p>Anti-block system ESP Teves Mk60 UDS</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- ESP switch</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul> </li> </ul>
		<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
2012/03	B4164T	1.6	180		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**

				<ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
			<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> front <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> </ul> side <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> </ul> </li> </ul>



Anti-block system  
ESP Teves Mk60 UDS

- Vehicle driving speed
- Mileage
- Battery voltage
- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- ESP switch
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Power supply voltages
- Calculated front left brake temperature
- Calculated front right brake temperature
- Calculated rear left brake temperature
- Calculated rear right brake temperature
- Stored brake pressure sensor offset
- Steering angle offset

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

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Central electronics  
Central electronics 3.0

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test
- Brake light/brake pedal position switch

• **Adjustments / settings**

- Start mode
- Program sensor code (activator)
- Sun roof initialization
- Reset crash detection signal
- Rear wiper with reverse gear
- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor

- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact

				Immobilizer Access system/immobilizer 3.0	<ul style="list-style-type: none"> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
				Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

VOLVO				V40 II - V40 II D3	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> front <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> </ul>

Airbag  
Airbag AB 10

- Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
- Steering wheel
- Seat belt lock switch 2 row center
- Resistance pre-load device 2 row center
- Resistance pretensioner driver side
- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side
- Seat belt lock switch 2 row left
- Seat belt lock switch 2 row right
- 2nd row center belt buckle current
- Passenger's airbag indicator lamp off
- Passenger categorization
- Deactivation switch AB BFS
- Driver seat AB/lap belt tensioner
- 2nd row, left belt buckle, current
- 2nd row, right belt buckle, current
- Airbag, passenger side
- Safety belt detection 2 row
- DS front belt tensioner IC resist.
- PS front belt tensioner IC resist.

Anti-block system  
ESP Teves Mk60 UDS

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Mileage
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - ESP switch
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Power supply voltages
  - Calculated front left brake temperature

				<ul style="list-style-type: none"> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul>
			Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
			Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>
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Central electronics  
Central electronics 3.0

- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch

	<ul style="list-style-type: none"> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Fuel warming up</li> </ul>



				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
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VOLVO					V40 II - V40 II D4	
Year	Engine	Liters	HP	System	Functions	
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> <li>front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> <li>side</li> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> </ul>	

		<ul style="list-style-type: none"> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
	<p>Anti-block system ESP Teves Mk60 UDS</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- ESP switch</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul> </li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
2012/03	D5204T4	2.0	177		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left

				<ul style="list-style-type: none"> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
			<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

VOLVO				V40 II - V40 II T5	
Year	Engine	Liters	HP	System	Functions

Airbag  
Airbag AB 10

- **Identification**
  - **Clear errors**
  - **Error memory**
  - **Current values**
    - Power supply
    - Vehicle driving speed
    - Battery voltage
    - Passenger compartment temperature
    - Kilometer reading
    - Voltage belt lock driver's side
    - Voltage belt lock front passenger's side
    - Longitudinal acceleration
    - Resistance side airbag driver's side
    - Resistance side airbag front passenger's side
    - Resistance windowbag driver's side
    - Resistance windowbag passenger's side
    - Front passenger airbag control light
    - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
  - Seat belt lock switch front passenger seat
  - Passeng. side airbag, deactivation switch,
- status
- Status airbag front passenger's side
  - Steering wheel
  - Seat belt lock switch 2 row center
  - Resistance pre-load device 2 row center
  - Resistance pretensioner driver side
  - Resistance pretensioner front passenger side
  - Resistance pre-load device 2 row left
  - Resistance pre-load device 2 row right
  - Resistance ZK1 front airbag driver's side
  - Resistance ZK2 front airbag driver's side
  - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
  - Seat belt lock switch 2 row right
  - 2nd row center belt buckle current
  - Passenger's airbag indicator lamp off
  - Passenger categorization
  - Deactivation switch AB BFS
  - Driver seat AB/lap belt tensioner
  - 2nd row, left belt buckle, current
  - 2nd row, right belt buckle, current
  - Airbag, passenger side
  - Safety belt detection 2 row
  - DS front belt tensioner IC resist.
  - PS front belt tensioner IC resist.

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Mileage
  - Battery voltage

Anti-block system  
ESP Teves Mk60 UDS

- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- ESP switch
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Power supply voltages
- Calculated front left brake temperature
- Calculated front right brake temperature
- Calculated rear left brake temperature
- Calculated rear right brake temperature
- Stored brake pressure sensor offset
- Steering angle offset

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

- **Identification**
- **Clear errors**

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Central electronics  
Central electronics 3.0

• **Functional tests**

- Alternator voltage functional test
- Brake light/brake pedal position switch

• **Adjustments / settings**

- Start mode
- Program sensor code (activator)
- Sun roof initialization
- Reset crash detection signal
- Rear wiper with reverse gear
- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor



- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch

				Immobilizer Access system/immobilizer 3.0	<ul style="list-style-type: none"> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
				Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

VOLVO					V50 - V50 T5	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> </ul> </li> </ul>	

Anti-block system  
ESP Teves Mk60

- rare right tire speed
- rear left tire speed
- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio

2004/04 - 2007/07	B5254T3	2.5	220	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> <li>- gear box control error</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Direct transmission Converter lockup</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Torque limitation</li> <li>- Kilometer reading</li> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> <li>- Time within 140 - 150 °C</li> <li>- Time &gt; 150 °C</li> <li>- Press. regul. sol. valve 1 set value</li> <li>- Pressure regulator solenoid valve 1 actual value</li> <li>- Pressure regulator solenoid valve 2 set value</li> <li>- Pressure regulator solenoid valve 2 actual value</li> <li>- Set value, solenoid valve, torque conv. lock-up</li> <li>- Converter bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b></li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> </ul>

		<ul style="list-style-type: none"> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul>
	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> <ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk60

- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1

2007/08 - 2012/12	B5254T7	2.5	230	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Direct transmission Converter lockup</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Torque limitation</li> <li>- Kilometer reading</li> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> <li>- Time within 140 - 150 °C</li> <li>- Time &gt; 150 °C</li> <li>- Press. regul. sol. valve 1 set value</li> <li>- Pressure regulator solenoid valve 1 actual value</li> <li>- Pressure regulator solenoid valve 2 set value</li> <li>- Pressure regulator solenoid valve 2 actual value</li> <li>- Set value, solenoid valve, torque conv. lock-up</li> <li>- Converter bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b></li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> </ul>



				<ul style="list-style-type: none"> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul>
		<p>Central electronics Central electronics, front, 9.12.1</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
		<p>Immobilizer Access system/immobilizer 2.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
			Electrical energy management Battery management 2.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					V50 - V50 2.4	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> </ul> </li> </ul>	

ESP Teves Mk60

- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1

2004/04 - 2010/07	B5244S5	2.4	140	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> <li>- modulating pressure: solenoid valve 2</li> <li>- Torque limitation</li> <li>- Kilometer reading</li> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> <li>- Time within 140 - 150 °C</li> <li>- Time &gt; 150 °C</li> <li>- Press. regul. sol. valve 1 set value</li> <li>- Pressure regulator solenoid valve 1 actual value</li> <li>- Pressure regulator solenoid valve 2 set value</li> <li>- Pressure regulator solenoid valve 2 actual value</li> <li>- Set value, solenoid valve, torque conv. lock-up</li> <li>- Converter bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b></li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> </ul>

Central electronics  
Central electronics, front, 9.12.1

- Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Basic adjustment, headlights auto adjustment
  - Reset undervoltage counter
  - Reset crash detection signal
  - Rear wiper with reverse gear
- **Error memory**
- **Current values**
  - Fuel pump relay
  - Power supply
  - Clutch switch
  - brake fluid level
  - Light switch
  - Back-up lights
  - Ignition key position
  - Main beam relay
  - Key code
  - Ignition key
  - Status Ignition lock
  - Windscreen washing water level
  - Front fog lights relay
  - Rear window wiper
  - Front windscreen wiper
  - Rear window froster relay
  - Vehicle power supply status
  - Headlight washer pump relay
  - Orientation light potentiometer
  - Rain sensor
  - Gas pedal position
  - Windshield washer relay
  - Rear window washer relay
- **Actuators**
  - Windshield washer system relay
  - Fog light
  - Headlights cleaning system
  - Relay for high-beam headlights
  - Rear window washer system

Immobilizer  
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adjustment: Unlocking options
- **Error memory**
- **Current values**
  - Power supply
  - Rear top unlocking switch
  - Brake pedal switch
  - Clutch pedal switch
  - Number of stored keys
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Remote control: Unlocking options
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Front left door handle button
  - Front right door handle button
  - Ignition lock activation
  - Rear right door handle button
  - Rear left door handle button
- **Actuators**
  - Unlock driver's door
  - Unlock front passenger's door
  - Unlock rear left door

					<ul style="list-style-type: none"> <li>- Lock rear left door</li> </ul>
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					V50 - V50 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> </ul> </li> </ul>	

Anti-block system  
ESP Teves Mk60

- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4

2004/04 - 2010/07	B5244S4	2.4	170 - 170	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> <li>- Direct transmission Converter lockup</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Torque limitation</li> <li>- Kilometer reading</li> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> <li>- Time within 140 - 150 °C</li> <li>- Time &gt; 150 °C</li> <li>- Press. regul. sol. valve 1 set value</li> <li>- Pressure regulator solenoid valve 1 actual value</li> <li>- Pressure regulator solenoid valve 2 set value</li> <li>- Pressure regulator solenoid valve 2 actual value</li> <li>- Set value, solenoid valve, torque conv. lock-up</li> <li>- Converter bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b></li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul>
					• <b>Identification</b>



Central electronics  
Central electronics, front, 9.12.1

- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Basic adjustment, headlights auto adjustment
  - Reset undervoltage counter
  - Reset crash detection signal
  - Rear wiper with reverse gear
- **Error memory**
- **Current values**
  - Fuel pump relay
  - Power supply
  - Clutch switch
  - brake fluid level
  - Light switch
  - Back-up lights
  - Ignition key position
  - Main beam relay
  - Key code
  - Ignition key
  - Status Ignition lock
  - Windscreen washing water level
  - Front fog lights relay
  - Rear window wiper
  - Front windscreen wiper
  - Rear window froster relay
  - Vehicle power supply status
  - Headlight washer pump relay
  - Orientation light potentiometer
  - Rain sensor
  - Gas pedal position
  - Windshield washer relay
  - Rear window washer relay
- **Actuators**
  - Windshield washer system relay
  - Fog light
  - Headlights cleaning system
  - Relay for high-beam headlights
  - Rear window washer system

Immobilizer  
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adjustment: Unlocking options
- **Error memory**
- **Current values**
  - Power supply
  - Rear top unlocking switch
  - Brake pedal switch
  - Clutch pedal switch
  - Number of stored keys
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Remote control: Unlocking options
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Front left door handle button
  - Front right door handle button
  - Ignition lock activation
  - Rear right door handle button
  - Rear left door handle button
- **Actuators**
  - Unlock driver's door

					<ul style="list-style-type: none"> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul>
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					V50 - V50 2.0D	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>	

Anti-block system  
ESP Teves Mk60

- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

Underbody/Steering  
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - control unit temperature
  - Power supply terminal 30
  - Steering wheel rotational speed
  - Engine status
  - Pump motor steering assistance
  - Power steering motor activation current
  - Power steering
  - Power steering motor activation
  - Power steering motor temperature
  - Speed-dependent power steering
  - Power steering motor specified speed
  - Power steering motor actual speed

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Basic adjustment, headlights auto adjustment
  - Reset undervoltage counter
  - Reset crash detection signal
  - Rear wiper with reverse gear
- **Error memory**
- **Current values**
  - Fuel pump relay

- 2010/07	D4204T	2.0	136	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>

			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>
			<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> </ul> </li> </ul>

2004/04 - 2007/07	D4204T2	2.0	131		<ul style="list-style-type: none"> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul>
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
				Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
			<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul>
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<b>VOLVO</b>	<b>V50 - V50 1.6D DRIVE</b>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> </ul> </li> </ul>



2004/11 - 2010/07	D4164T...	1.6	109 - 110		<ul style="list-style-type: none"> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul>
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
				Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>				

				Immobilizer Access system/immobilizer 2.0	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>

VOLVO				V50 - V50 1.8	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> </ul> </li> </ul>

				<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul>
				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
<p>2004/04 -</p>	<p>B4184S11</p>	<p>1.8</p>	<p>125</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> </ul> </li> </ul>

Central electronics  
Central electronics, front, 9.12.1

- Clutch switch
- brake fluid level
- Light switch
- Back-up lights
- Ignition key position
- Main beam relay
- Key code
- Ignition key
- Status Ignition lock
- Windscreen washing water level
- Front fog lights relay
- Rear window wiper
- Front windscreen wiper
- Rear window froster relay
- Vehicle power supply status
- Headlight washer pump relay
- Orientation light potentiometer
- Rain sensor
- Gas pedal position
- Windshield washer relay
- Rear window washer relay
- **Actuators**
  - Windshield washer system relay
  - Fog light
  - Headlights cleaning system
  - Relay for high-beam headlights
  - Rear window washer system

Immobilizer  
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adjustment: Unlocking options
- **Error memory**
- **Current values**
  - Power supply
  - Rear top unlocking switch
  - Brake pedal switch
  - Clutch pedal switch
  - Number of stored keys
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Remote control: Unlocking options
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Front left door handle button
  - Front right door handle button
  - Ignition lock activation
  - Rear right door handle button
  - Rear left door handle button
- **Actuators**
  - Unlock driver's door
  - Unlock front passenger's door
  - Unlock rear left door
  - Lock rear left door

Parking assisting system  
Park Distance Control 9.12.1

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Calculated distance at rear
  - Calculated front distance

- **Identification**

				<p>Electrical energy management Battery management 2.0</p> <ul style="list-style-type: none"> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>
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VOLVO					V50 - V50 1.6	
Year	Engine	Liters	HP	System	Functions	
				<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul>
				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
2005/01 - 2012/12	B4164S3	1.6	100	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
	<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
	<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul>
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<b>VOLVO</b>	<b>V50 - V50 T5 AWD</b>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> </ul> </li> </ul>



		<ul style="list-style-type: none"> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul>
	<p>Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- Gear lever AT position</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- stop lights switch</li> <li>- Winter switch</li> <li>- Passenger compartment temperature</li> <li>- Control unit power supply</li> <li>- Inserted gear</li> <li>- system power supply</li> <li>- Engine status</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gear box control error</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Direct transmission Converter lockup</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Torque limitation</li> <li>- Kilometer reading</li> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> </ul> </li> </ul>

2004/04 - 2007/07	B5254T3	2.5	220	<ul style="list-style-type: none"> <li>- Time within 140 - 150 °C</li> <li>- Time &gt; 150 °C</li> <li>- Press. regul. sol. valve 1 set value</li> <li>- Pressure regulator solenoid valve 1 actual value</li> <li>- Pressure regulator solenoid valve 2 set value</li> <li>- Pressure regulator solenoid valve 2 actual value</li> <li>- Set value, solenoid valve, torque conv. lock-up</li> <li>- Converter bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
			Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
			Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
	<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> </ul> </li> </ul>

			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul>
			<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul>
	<p>Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- Gear lever AT position</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- stop lights switch</li> <li>- Winter switch</li> <li>- Passenger compartment temperature</li> <li>- Control unit power supply</li> <li>- Inserted gear</li> <li>- system power supply</li> <li>- Engine status</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gear box control error</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Direct transmission Converter lockup</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Torque limitation</li> <li>- Kilometer reading</li> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> <li>- Time within 140 - 150 °C</li> <li>- Time &gt; 150 °C</li> </ul> </li> </ul>

2007/08 - 2010/08	B5254T7	2.5	230	<ul style="list-style-type: none"> <li>- Press. regul. sol. valve 1 set value</li> <li>- Pressure regulator solenoid valve 1 actual value</li> <li>- Pressure regulator solenoid valve 2 set value</li> <li>- Pressure regulator solenoid valve 2 actual value</li> <li>- Set value, solenoid valve, torque conv. lock-up</li> <li>- Converter bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
			Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
			Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
	<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul>
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<b>VOLVO</b>	<b>V50 - V50 D5</b>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>



		<ul style="list-style-type: none"> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul>
	<p>Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- Gear lever AT position</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- stop lights switch</li> <li>- Winter switch</li> <li>- Passenger compartment temperature</li> <li>- Control unit power supply</li> <li>- Inserted gear</li> <li>- system power supply</li> <li>- Engine status</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- gear box control error</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Direct transmission Converter lockup</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Torque limitation</li> <li>- Kilometer reading</li> <li>- Gearbox input speed</li> <li>- Gearbox speed sensor (input)</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Transmission output speed</li> <li>- Engine torque</li> <li>- Ambient temperature</li> <li>- Transformer bridging magnetic valve</li> <li>- Transmission oil temperature sensor voltage</li> <li>- Selector lever module</li> <li>- Torque reduction on changing gear</li> <li>- Transmission output torque</li> <li>- Transmission oil temper. on starting</li> <li>- Time within 100 - 110 °C</li> <li>- Time within 110 - 120 °C</li> <li>- Time within 120 - 130 °C</li> <li>- Time within 130 - 140 °C</li> <li>- Time within 140 - 150 °C</li> <li>- Time &gt; 150 °C</li> <li>- Press. regul. sol. valve 1 set value</li> <li>- Pressure regulator solenoid valve 1 actual value</li> <li>- Pressure regulator solenoid valve 2 set value</li> <li>- Pressure regulator solenoid valve 2 actual value</li> <li>- Set value, solenoid valve, torque conv. lock-up</li> </ul> </li> </ul>

2006/04 - 2010/07	D5244T8...	2.4	180	<ul style="list-style-type: none"> <li>- Converter bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
			Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
			Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
			<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul>
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<b>VOLVO</b>	<b>V50 - V50 1.8 F Flexifuel</b>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> </ul> </li> </ul>

2006/04 - 2010/07	B4184S8	1.8	125	Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul> </li> </ul>
				Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>

			<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Passenger compartment temperature</li> <li>- Engine status</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Kilometer reading</li> <li>- Transmission skidding control</li> <li>- Brake exertion electrical distribution</li> <li>- Steering wheel rotational speed</li> <li>- Ambient temperature</li> <li>- Brake pedal travel</li> <li>- ABS control</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Vehicle acceleration</li> <li>- Brake pressure sensor</li> <li>- Stored brake pressure sensor offset</li> <li>- ESP control</li> <li>- Yaw rate sensor, offset</li> <li>- Front left wheel acceleration</li> <li>- Front right wheel acceleration</li> <li>- Rear left wheel acceleration</li> <li>- Rear right wheel acceleration</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>- Torque reduction request by ASR</li> <li>- Central electronics power supply</li> <li>- Steering direction</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> </ul> </li> </ul>

2006/10 - 2012/12	B4204S3	2.0	145	Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- control unit temperature</li> <li>- Power supply terminal 30</li> <li>- Steering wheel rotational speed</li> <li>- Engine status</li> <li>- Pump motor steering assistance</li> <li>- Power steering motor activation current</li> <li>- Power steering</li> <li>- Power steering motor activation</li> <li>- Power steering motor temperature</li> <li>- Speed-dependent power steering</li> <li>- Power steering motor specified speed</li> <li>- Power steering motor actual speed</li> </ul>
				Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> </ul> </li> </ul>



				Immobilizer Access system/immobilizer 2.0	<ul style="list-style-type: none"> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> <ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					V50 - V50 2.0 F Flexifuel	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> <li>- ASR test</li> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position</li> </ul> </li> </ul>	

Anti-block system  
ESP Teves Mk60

- adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Longitudinal acceleration sensor
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Passenger compartment temperature
  - Engine status
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Kilometer reading
  - Transmission skidding control
  - Brake exertion electrical distribution
  - Steering wheel rotational speed
  - Ambient temperature
  - Brake pedal travel
  - ABS control
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored steering angle sensor offset
  - Vehicle acceleration
  - Brake pressure sensor
  - Stored brake pressure sensor offset
  - ESP control
  - Yaw rate sensor, offset
  - Front left wheel acceleration
  - Front right wheel acceleration
  - Rear left wheel acceleration
  - Rear right wheel acceleration
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
  - Torque reduction request by ASR
  - Central electronics power supply
  - Steering direction

Underbody/Steering  
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - control unit temperature
  - Power supply terminal 30
  - Steering wheel rotational speed
  - Engine status
  - Pump motor steering assistance
  - Power steering motor activation current
  - Power steering
  - Power steering motor activation
  - Power steering motor temperature
  - Speed-dependent power steering
  - Power steering motor specified speed
  - Power steering motor actual speed

2009/08 - 2012/12	B4204S4	2.0	146	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					V50 - V50 D2 DRIVe	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk60 UDS	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- ESP switch</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul>
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
2011/08 - 2012/12	D4162T	1.6	114	Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> </ul> </li> </ul>

			<ul style="list-style-type: none"> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
		<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
		<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
		<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul>
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<b>VOLVO</b>	<b>V50 - V50 D3</b>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60 UDS	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- ESP switch</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b></li> </ul>

2010/08 - 2012/12	D5204T5	2.0	150	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> </ul>



Central electronics  
Central electronics, front, 9.12.1

- Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Basic adjustment, headlights auto adjustment
  - Reset undervoltage counter
  - Reset crash detection signal
  - Rear wiper with reverse gear
- **Error memory**
- **Current values**
  - Fuel pump relay
  - Power supply
  - Clutch switch
  - brake fluid level
  - Light switch
  - Back-up lights
  - Ignition key position
  - Main beam relay
  - Key code
  - Ignition key
  - Status Ignition lock
  - Windscreen washing water level
  - Front fog lights relay
  - Rear window wiper
  - Front windscreen wiper
  - Rear window froster relay
  - Vehicle power supply status
  - Headlight washer pump relay
  - Orientation light potentiometer
  - Rain sensor
  - Gas pedal position
  - Windshield washer relay
  - Rear window washer relay
- **Actuators**
  - Windshield washer system relay
  - Fog light
  - Headlights cleaning system
  - Relay for high-beam headlights
  - Rear window washer system

Immobilizer  
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adjustment: Unlocking options
- **Error memory**
- **Current values**
  - Power supply
  - Rear top unlocking switch
  - Brake pedal switch
  - Clutch pedal switch
  - Number of stored keys
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Remote control: Unlocking options
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Front left door handle button
  - Front right door handle button
  - Ignition lock activation
  - Rear right door handle button
  - Rear left door handle button
- **Actuators**
  - Unlock driver's door
  - Unlock front passenger's door
  - Unlock rear left door

				<ul style="list-style-type: none"> <li>- Lock rear left door</li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 9.12.1</p>	
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO					V50 - V50 D4	
Year	Engine	Liters	HP	System	Functions	
				<p>Anti-block system ESP Teves Mk60 UDS</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor</li> <li>- Vehicle driving speed</li> <li>- Mileage</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> </ul> </li> </ul>	

	<ul style="list-style-type: none"> <li>- reflexive angle</li> <li>- ESP switch</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Power supply voltages</li> <li>- Calculated front left brake temperature</li> <li>- Calculated front right brake temperature</li> <li>- Calculated rear left brake temperature</li> <li>- Calculated rear right brake temperature</li> <li>- Stored brake pressure sensor offset</li> <li>- Steering angle offset</li> </ul>
	<p data-bbox="499 1458 911 1518">Gear box control 6-gears automatic transmission TF80SC</p> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> </ul> </li> </ul>

2010/08 - 2012/12	D5204T	2.0	177		<ul style="list-style-type: none"> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
				Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Basic adjustment, headlights auto adjustment</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Power supply</li> <li>- Clutch switch</li> <li>- brake fluid level</li> <li>- Light switch</li> <li>- Back-up lights</li> <li>- Ignition key position</li> <li>- Main beam relay</li> <li>- Key code</li> <li>- Ignition key</li> <li>- Status Ignition lock</li> <li>- Windscreen washing water level</li> <li>- Front fog lights relay</li> <li>- Rear window wiper</li> <li>- Front windscreen wiper</li> <li>- Rear window froster relay</li> <li>- Vehicle power supply status</li> <li>- Headlight washer pump relay</li> <li>- Orientation light potentiometer</li> <li>- Rain sensor</li> <li>- Gas pedal position</li> <li>- Windshield washer relay</li> <li>- Rear window washer relay</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Fog light</li> <li>- Headlights cleaning system</li> <li>- Relay for high-beam headlights</li> <li>- Rear window washer system</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> </ul>				

				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> <li>- Adjustment: Unlocking options</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Rear top unlocking switch</li> <li>- Brake pedal switch</li> <li>- Clutch pedal switch</li> <li>- Number of stored keys</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Remote control: Unlocking options</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Ignition lock activation</li> <li>- Rear right door handle button</li> <li>- Rear left door handle button</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Unlock driver's door</li> <li>- Unlock front passenger's door</li> <li>- Unlock rear left door</li> <li>- Lock rear left door</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Calculated distance at rear</li> <li>- Calculated front distance</li> </ul> </li> </ul>
				<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> <li>- Reset no-load current information</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Communication with battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery status</li> <li>- Battery charge (SOC value)</li> <li>- Alternator control mode</li> <li>- No-load current mean value</li> <li>- Battery temperature</li> <li>- Battery charging current</li> </ul> </li> </ul>

VOLVO				V60 - V60 2.0T	
Year	Engine	Liters	HP	System	Functions
					• Identification

Airbag  
Airbag AB 10

- **Clear errors**
  - **Error memory**
  - **Current values**
    - Power supply
    - Vehicle driving speed
    - Battery voltage
    - Passenger compartment temperature
    - Kilometer reading
    - Voltage belt lock driver's side
    - Voltage belt lock front passenger's side
    - Longitudinal acceleration
    - Resistance side airbag driver's side
    - Resistance side airbag front passenger's side
    - Resistance windowbag driver's side
    - Resistance windowbag passenger's side
    - Front passenger airbag control light
    - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
  - Seat belt lock switch front passenger seat
  - Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
  - Steering wheel
  - Seat belt lock switch 2 row center
  - Resistance pre-load device 2 row center
  - Resistance pretensioner driver side
  - Resistance pretensioner front passenger side
  - Resistance pre-load device 2 row left
  - Resistance pre-load device 2 row right
  - Resistance ZK1 front airbag driver's side
  - Resistance ZK2 front airbag driver's side
  - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
  - Seat belt lock switch 2 row right
  - 2nd row center belt buckle current
  - Passenger's airbag indicator lamp off
  - Passenger categorization
  - Deactivation switch AB BFS
  - Driver seat AB/lap belt tensioner
  - 2nd row, left belt buckle, current
  - 2nd row, right belt buckle, current
  - Airbag, passenger side
  - Safety belt detection 2 row
  - DS front belt tensioner IC resist.
  - PS front belt tensioner IC resist.

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch

Anti-block system  
ESP Teves Mk25 E1

- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

- **Identification**

2010/09 - 2011/08	B4204T6	2.0	203	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> </ul> </li> </ul>



Central electronics  
Central electronics 3.0

- Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**

		<ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				V60 - V60 T6 AWD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> </ul> </li> </ul>

Airbag  
Airbag AB 10

- Resistance side airbag driver's side
  - Resistance side airbag front passenger's side
  - Resistance windowbag driver's side
  - Resistance windowbag passenger's side
  - Front passenger airbag control light
  - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
  - Seat belt lock switch front passenger seat
  - Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
  - Steering wheel
  - Seat belt lock switch 2 row center
  - Resistance pre-load device 2 row center
  - Resistance pretensioner driver side
  - Resistance pretensioner front passenger side
  - Resistance pre-load device 2 row left
  - Resistance pre-load device 2 row right
  - Resistance ZK1 front airbag driver's side
  - Resistance ZK2 front airbag driver's side
  - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
  - Seat belt lock switch 2 row right
  - 2nd row center belt buckle current
  - Passenger's airbag indicator lamp off
  - Passenger categorization
  - Deactivation switch AB BFS
  - Driver seat AB/lap belt tensioner
  - 2nd row, left belt buckle, current
  - 2nd row, right belt buckle, current
  - Airbag, passenger side
  - Safety belt detection 2 row
  - DS front belt tensioner IC resist.
  - PS front belt tensioner IC resist.

Anti-block system  
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration

		<ul style="list-style-type: none"> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> </ul> </li> </ul>

6-gears automatic transmission TF80SC

- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor
  - Parking brake, control light
  - Actuation counter
  - Left parking brake request

2010/09	B6304T4	3.0	305	Central electronics Central electronics 3.0	<ul style="list-style-type: none"> <li>- Right parking brake request</li> <li>- Status Handbrake</li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> <li>- Time: Fourth last alarm triggering</li> <li>- Tank flap unlocking relay</li> <li>- Rear fog light relay</li> <li>- Windscreen washer system switch</li> <li>- Center stop lamp actuation</li> </ul> </li> </ul>
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- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch



				<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
				<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					V60 - V60 D3	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch,</li> </ul> <p>status</p> <ul style="list-style-type: none"> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's</li> </ul>	

		<p>side</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
	<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b></li> </ul>

Electrical energy management  
Battery management 3.0

- Battery voltage
- Battery charging status
- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2

2010/09 - 2011/08	D5204T2	2.0	163		<ul style="list-style-type: none"> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
				Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuations during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay

	<ul style="list-style-type: none"> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
	<p><b>• Identification</b></p>

Underbody/Steering  
Adaptive damping system 3.0

- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontality) sensor output: rear left
  - Car level (horizontality) sensor output: rear right
  - Car level (horizontality) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature
  - Auxiliary/supplementary heater operating time
  - Auxiliary/supplementary heater heating time
  - Electronic control unit power supply
  - Glow plug
  - Combustion air blower actuation
  - Combustion air blower
  - Supplem./auxiliary heater fuel pump
  - Central electronics power supply

Parking assisting system  
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Reverse gear
  - Trailer detection
  - Distance, left front, outside
  - Distance, left front, inside
  - Distance, right front, inside
  - Distance, right front, outside
  - Vehicle drive status
  - Rear left outer distance
  - Rear left inner distance



				<ul style="list-style-type: none"> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
			Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> <li>front <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> </ul> </li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> </ul>

Anti-block system  
ESP Teves Mk25 E1

• **Current values**

- Vehicle driving speed
- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

• **Identification**

• **Adjustments / settings**

- Battery replacement
- Battery sensor adaptation reset

• **Current values**

- Battery voltage
- Battery charging status
- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode

• **Error memory**

Gear box control  
6-gears automatic transmission TF80SC

- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
<p>2012/09 -</p>	<p>D5204T7</p>	<p>2.0</p>	<p>136</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right

		<ul style="list-style-type: none"> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				V60 - V60 D5	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> </ul> </li> </ul>

Airbag  
Airbag AB 10

- Seat occupation sensor front passenger's side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
- Steering wheel
- Seat belt lock switch 2 row center
- Resistance pre-load device 2 row center
- Resistance pretensioner driver side
- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side
- Seat belt lock switch 2 row left
- Seat belt lock switch 2 row right
- 2nd row center belt buckle current
- Passenger's airbag indicator lamp off
- Passenger categorization
- Deactivation switch AB BFS
- Driver seat AB/lap belt tensioner
- 2nd row, left belt buckle, current
- 2nd row, right belt buckle, current
- Airbag, passenger side
- Safety belt detection 2 row
- DS front belt tensioner IC resist.
- PS front belt tensioner IC resist.

Anti-block system  
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset



		<ul style="list-style-type: none"> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuations during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

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Central electronics  
Central electronics 3.0

• **Functional tests**

- Alternator voltage functional test
- Brake light/brake pedal position switch

• **Adjustments / settings**

- Start mode
- Program sensor code (activator)
- Sun roof initialization
- Reset crash detection signal
- Rear wiper with reverse gear
- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor

- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch

Immobilizer  
Access system/immobilizer 3.0

- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontality) sensor output: rear left
  - Car level (horizontality) sensor output: rear right
  - Car level (horizontality) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature
  - Auxiliary/supplementary heater operating time
  - Auxiliary/supplementary heater heating time
  - Electronic control unit power supply
  - Glow plug
  - Combustion air blower actuation

				<ul style="list-style-type: none"> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
			Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
			Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch,</li> </ul> <p>status</p> <ul style="list-style-type: none"> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> </ul> <p>side</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> </ul>

				<ul style="list-style-type: none"> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>



				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
2011/09	D5244T15	2.4	215		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply

		<ul style="list-style-type: none"> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
		<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> </ul>

				Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				V60 - V60 T3	
Year	Engine	Liters	HP	System	Functions

Airbag  
Airbag AB 10

- **Identification**
  - **Clear errors**
  - **Error memory**
  - **Current values**
    - Power supply
    - Vehicle driving speed
    - Battery voltage
    - Passenger compartment temperature
    - Kilometer reading
    - Voltage belt lock driver's side
    - Voltage belt lock front passenger's side
    - Longitudinal acceleration
    - Resistance side airbag driver's side
    - Resistance side airbag front passenger's side
    - Resistance windowbag driver's side
    - Resistance windowbag passenger's side
    - Front passenger airbag control light
    - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
  - Seat belt lock switch front passenger seat
  - Passeng. side airbag, deactivation switch,
- status
- Status airbag front passenger's side
  - Steering wheel
  - Seat belt lock switch 2 row center
  - Resistance pre-load device 2 row center
  - Resistance pretensioner driver side
  - Resistance pretensioner front passenger side
  - Resistance pre-load device 2 row left
  - Resistance pre-load device 2 row right
  - Resistance ZK1 front airbag driver's side
  - Resistance ZK2 front airbag driver's side
  - Resistance ZK1 front airbag front passenger's
- side
- Seat belt lock switch 2 row left
  - Seat belt lock switch 2 row right
  - 2nd row center belt buckle current
  - Passenger's airbag indicator lamp off
  - Passenger categorization
  - Deactivation switch AB BFS
  - Driver seat AB/lap belt tensioner
  - 2nd row, left belt buckle, current
  - 2nd row, right belt buckle, current
  - Airbag, passenger side
  - Safety belt detection 2 row
  - DS front belt tensioner IC resist.
  - PS front belt tensioner IC resist.

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply

Anti-block system  
ESP Teves Mk25 E1

- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
<p>2010/09 -</p>	<p>B4164T3</p>	<p>1.6</p>	<p>150</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5



		<ul style="list-style-type: none"> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					V60 - V60 T4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> </ul> </li> </ul>	

Airbag  
Airbag AB 10

- Longitudinal acceleration
  - Resistance side airbag driver's side
  - Resistance side airbag front passenger's side
  - Resistance windowbag driver's side
  - Resistance windowbag passenger's side
  - Front passenger airbag control light
  - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
  - Seat belt lock switch front passenger seat
  - Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
  - Steering wheel
  - Seat belt lock switch 2 row center
  - Resistance pre-load device 2 row center
  - Resistance pretensioner driver side
  - Resistance pretensioner front passenger side
  - Resistance pre-load device 2 row left
  - Resistance pre-load device 2 row right
  - Resistance ZK1 front airbag driver's side
  - Resistance ZK2 front airbag driver's side
  - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
  - Seat belt lock switch 2 row right
  - 2nd row center belt buckle current
  - Passenger's airbag indicator lamp off
  - Passenger categorization
  - Deactivation switch AB BFS
  - Driver seat AB/lap belt tensioner
  - 2nd row, left belt buckle, current
  - 2nd row, right belt buckle, current
  - Airbag, passenger side
  - Safety belt detection 2 row
  - DS front belt tensioner IC resist.
  - PS front belt tensioner IC resist.

Anti-block system  
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset

		<ul style="list-style-type: none"> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> </ul> </li> </ul>

				Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
2010/09	B4164T	1.6	180		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof

				<ul style="list-style-type: none"> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
			<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				V60 - V60 T5	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> </ul>



Airbag  
Airbag AB 10

- Status airbag front passenger's side
  - Steering wheel
  - Seat belt lock switch 2 row center
  - Resistance pre-load device 2 row center
  - Resistance pretensioner driver side
  - Resistance pretensioner front passenger side
  - Resistance pre-load device 2 row left
  - Resistance pre-load device 2 row right
  - Resistance ZK1 front airbag driver's side
  - Resistance ZK2 front airbag driver's side
  - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
  - Seat belt lock switch 2 row right
  - 2nd row center belt buckle current
  - Passenger's airbag indicator lamp off
  - Passenger categorization
  - Deactivation switch AB BFS
  - Driver seat AB/lap belt tensioner
  - 2nd row, left belt buckle, current
  - 2nd row, right belt buckle, current
  - Airbag, passenger side
  - Safety belt detection 2 row
  - DS front belt tensioner IC resist.
  - PS front belt tensioner IC resist.

Anti-block system  
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber

		<ul style="list-style-type: none"> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuations during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
2010/09	B4204T7	2.0	241	Central electronics Central electronics 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> <li>- Time: Fourth last alarm triggering</li> <li>- Tank flap unlocking relay</li> <li>- Rear fog light relay</li> <li>- Windscreen washer system switch</li> </ul> </li> </ul>

- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch

Immobilizer  
Access system/immobilizer 3.0

- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontality) sensor output: rear left
  - Car level (horizontality) sensor output: rear right
  - Car level (horizontality) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act. current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature

					<ul style="list-style-type: none"> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				V60 - V60 D5 AWD	
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> </ul> <ul style="list-style-type: none"> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's</li> </ul>

		<p>side</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
	<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b></li> </ul>

Electrical energy management  
Battery management 3.0

- Battery voltage
- Battery charging status
- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2



					<ul style="list-style-type: none"> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
				Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
2010/09 - 2011/08	D5244T10	2.4	205		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- **Error memory**

- **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay

	<ul style="list-style-type: none"> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
	<p><b>• Identification</b></p>

Underbody/Steering  
Adaptive damping system 3.0

- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontality) sensor output: rear left
  - Car level (horizontality) sensor output: rear right
  - Car level (horizontality) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature
  - Auxiliary/supplementary heater operating time
  - Auxiliary/supplementary heater heating time
  - Electronic control unit power supply
  - Glow plug
  - Combustion air blower actuation
  - Combustion air blower
  - Supplem./auxiliary heater fuel pump
  - Central electronics power supply

Parking assisting system  
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Reverse gear
  - Trailer detection
  - Distance, left front, outside
  - Distance, left front, inside
  - Distance, right front, inside
  - Distance, right front, outside
  - Vehicle drive status
  - Rear left outer distance
  - Rear left inner distance

				<ul style="list-style-type: none"> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
			Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> <li>front <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> </ul> </li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> <li>side <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**

			<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b></li> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
			<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Release parking brake</li> <li>- Parking brake apply</li> <li>• <b>Adjustments / settings</b></li> </ul>

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
<p>2011/09 -</p>	<p>D5244T15</p>	<p>2.4</p>	<p>215</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> </ul> </li> </ul>



Central electronics  
Central electronics 3.0

- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left

		<ul style="list-style-type: none"> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Front right damper status</li> <li>- Rear left damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Rear right damper status</li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				V60 - V60 DRIVE	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> </ul> </li> </ul>

Airbag  
Airbag AB 10

- Seat occupation sensor front passenger's side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
- Steering wheel
- Seat belt lock switch 2 row center
- Resistance pre-load device 2 row center
- Resistance pretensioner driver side
- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side
- Seat belt lock switch 2 row left
- Seat belt lock switch 2 row right
- 2nd row center belt buckle current
- Passenger's airbag indicator lamp off
- Passenger categorization
- Deactivation switch AB BFS
- Driver seat AB/lap belt tensioner
- 2nd row, left belt buckle, current
- 2nd row, right belt buckle, current
- Airbag, passenger side
- Safety belt detection 2 row
- DS front belt tensioner IC resist.
- PS front belt tensioner IC resist.

Anti-block system  
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset

		<ul style="list-style-type: none"> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> </ul> </li> </ul>

2011/09 -	D 4162T	1.6	116	<ul style="list-style-type: none"> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

Immobilizer  
Access system/immobilizer 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Number of registered master keys
  - Number of registered slave keys
  - Front left door handle button
  - Front right door handle button
  - Rear right door handle button
  - Rear lid exterior antenna
  - Front interior antenna
  - Rear interior antenna
  - Rear left door handle button
  - Rear right antenna
  - Rear left antenna
  - Start/Stop button
  - Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontal) sensor output: rear left
  - Car level (horizontal) sensor output: rear right
  - Car level (horizontal) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage



				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					V60 - V60 T4F	
Year	Engine	Liters	HP	System	Functions	
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch,</li> </ul> <p>status</p> <ul style="list-style-type: none"> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> </ul>	

Anti-block system  
ESP Teves Mk25 E1

- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side
- Seat belt lock switch 2 row left
- Seat belt lock switch 2 row right
- 2nd row center belt buckle current
- Passenger's airbag indicator lamp off
- Passenger categorization
- Deactivation switch AB BFS
- Driver seat AB/lap belt tensioner
- 2nd row, left belt buckle, current
- 2nd row, right belt buckle, current
- Airbag, passenger side
- Safety belt detection 2 row
- DS front belt tensioner IC resist.
- PS front belt tensioner IC resist.

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor
  - Parking brake, control light
  - Actuation counter
  - Left parking brake request
  - Right parking brake request
  - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**

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Central electronics  
Central electronics 3.0

- Alternator voltage functional test
- Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch

- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch

Immobilizer  
Access system/immobilizer 3.0

- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontality) sensor output: rear left
  - Car level (horizontality) sensor output: rear right
  - Car level (horizontality) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act. current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature
  - Auxiliary/supplementary heater operating time
  - Auxiliary/supplementary heater heating time
  - Electronic control unit power supply
  - Glow plug
  - Combustion air blower actuation

					<ul style="list-style-type: none"> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				V60 - V60 D4	
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch,</li> </ul> <p>status</p> <ul style="list-style-type: none"> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> </ul> <p>side</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> </ul>

		<ul style="list-style-type: none"> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul>
	<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
	<p>Electrical energy management</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> </ul> </li> </ul>



Battery management 3.0

- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
2011/09	D5204T3	2.0	163		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering

				<ul style="list-style-type: none"> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> </ul> </li> </ul>

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> </ul> </li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> <li>front <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> </ul> </li> <li>- Passeng. side airbag, deactivation switch, status <ul style="list-style-type: none"> <li>- Status airbag front passenger's side</li> </ul> </li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> <li>- Resistance pretensioner front passenger side</li> <li>- Resistance pre-load device 2 row left</li> <li>- Resistance pre-load device 2 row right</li> <li>- Resistance ZK1 front airbag driver's side</li> <li>- Resistance ZK2 front airbag driver's side</li> <li>- Resistance ZK1 front airbag front passenger's side</li> <li>side <ul style="list-style-type: none"> <li>- Seat belt lock switch 2 row left</li> <li>- Seat belt lock switch 2 row right</li> <li>- 2nd row center belt buckle current</li> <li>- Passenger's airbag indicator lamp off</li> <li>- Passenger categorization</li> <li>- Deactivation switch AB BFS</li> <li>- Driver seat AB/lap belt tensioner</li> <li>- 2nd row, left belt buckle, current</li> <li>- 2nd row, right belt buckle, current</li> <li>- Airbag, passenger side</li> <li>- Safety belt detection 2 row</li> <li>- DS front belt tensioner IC resist.</li> <li>- PS front belt tensioner IC resist.</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuations during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left

				<ul style="list-style-type: none"> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
2012/11	D5244T15	2.4	215	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> </ul> </li> </ul>



Central electronics  
Central electronics 3.0

- Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

Immobilizer  
Access system/immobilizer 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Number of registered master keys
  - Number of registered slave keys
  - Front left door handle button
  - Front right door handle button
  - Rear right door handle button
  - Rear lid exterior antenna
  - Front interior antenna
  - Rear interior antenna
  - Rear left door handle button
  - Rear right antenna
  - Rear left antenna
  - Start/Stop button
  - Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontal) sensor output: rear left
  - Car level (horizontal) sensor output: rear right
  - Car level (horizontal) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act. current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				V60 - V60 D4 AWD	
Year	Engine	Liters	HP	System	Functions
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Kilometer reading</li> <li>- Voltage belt lock driver's side</li> <li>- Voltage belt lock front passenger's side</li> <li>- Longitudinal acceleration</li> <li>- Resistance side airbag driver's side</li> <li>- Resistance side airbag front passenger's side</li> <li>- Resistance windowbag driver's side</li> <li>- Resistance windowbag passenger's side</li> <li>- Front passenger airbag control light</li> <li>- Seat occupation sensor front passenger's side</li> </ul> </li> </ul> <p>front</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Passeng. side airbag, deactivation switch, status</li> <li>- Status airbag front passenger's side</li> <li>- Steering wheel</li> <li>- Seat belt lock switch 2 row center</li> <li>- Resistance pre-load device 2 row center</li> <li>- Resistance pretensioner driver side</li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side
- Seat belt lock switch 2 row left
- Seat belt lock switch 2 row right
- 2nd row center belt buckle current
- Passenger's airbag indicator lamp off
- Passenger categorization
- Deactivation switch AB BFS
- Driver seat AB/lap belt tensioner
- 2nd row, left belt buckle, current
- 2nd row, right belt buckle, current
- Airbag, passenger side
- Safety belt detection 2 row
- DS front belt tensioner IC resist.
- PS front belt tensioner IC resist.

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current

				<ul style="list-style-type: none"> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
			Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
			Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
2012/09	D5244T17	2.4	163	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes

Immobilizer  
Access system/immobilizer 3.0

- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject
- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Number of registered master keys
  - Number of registered slave keys
  - Front left door handle button
  - Front right door handle button
  - Rear right door handle button
  - Rear lid exterior antenna
  - Front interior antenna
  - Rear interior antenna
  - Rear left door handle button
  - Rear right antenna



				<ul style="list-style-type: none"> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
			Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
			Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			Parking assisting system	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> </ul> </li> </ul>

				Park Distance Control 3.0	<ul style="list-style-type: none"> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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**VOLVO** **V70 - V70 2.3i**

Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> </ul>

Gear box control  
5-gears automatic transmission 55-50/51SN1.0

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

Gear box control  
5-gears automatic transmission EGS 50-42  
CAN

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - kick-down switch
  - Engine revolution
  - Winter switch
  - Oil temperature sensor gear box
  - Engine status
  - Gear selection position
  - gear box oil temperature

1998/07	B5234T3	2.3	209	<ul style="list-style-type: none"> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Alternator voltage functional test</li> <li>• <b>Adjustments / settings</b></li> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> </ul>

Central electronics  
Central electronics 1.0

- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left

					<ul style="list-style-type: none"> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
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VOLVO					V70 - V70 R 2.3 AWD	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> </ul> </li> </ul>	

		<ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
	<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

1999/09  
-  
2000/08

B5234T3

2.3

236

- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal



Central electronics  
Central electronics 1.0

- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating

					<ul style="list-style-type: none"> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
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**VOLVO** **V70 I - V70 I 2.0**

Year	Engine	Liters	HP	System	Functions
1997/01 - 1999/07	B5202FS	2.0	127	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
1997/01 - 2000/03	B5204S	2.0	143	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>

VOLVO				V70 I - V70 I 2.5	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

1997/01 - 2000/03	B5252S	2.4	144	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>

VOLVO					V70 I - V70 I 2.5 20V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>	

1997/01 - 2000/03	B5254S	2.4	165	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>

VOLVO					V70 I - V70 IT-5	
Year	Engine	Liters	HP	System	Functions	
					<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> </ul>	

1997/01 - 2000/03	B5234T3	2.3	240	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>

VOLVO					V70 I - V70 I 2.5 TDI	
Year	Engine	Liters	HP	System	Functions	
				<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> </ul> </li> </ul>	

1997/01 - 2000/03	D5252T	2.5	140		<ul style="list-style-type: none"> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>

VOLVO				V70 I - V70 I 2.0 Turbo	
Year	Engine	Liters	HP	System	Functions
				Gear box control 5-gears automatic transmission EGS 50-42 CAN	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> </ul>

<p>1997/01 - 1999/07</p>	<p>B5204T3</p>	<p>2.0</p>	<p>226</p>	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
<p>1997/01 - 2000/03</p>	<p>B5204T</p>	<p>2.0</p>	<p>211</p>	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>



				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
1997/01 - 1998/07	B5204T2	2.0	180	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>

VOLVO					V70 I - V70 I 2.5 T AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>	

1997/01 - 2000/03	B5254T	2.4	193	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>

VOLVO					V70 I - V70 I 2.3R	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> </ul> </li> </ul>	

1997/01 - 1998/07	B5234T4	2.3	250	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
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VOLVO					V70 I - V70 I 2.3	
Year	Engine	Liters	HP	System	Functions	
1997/01 - 1998/07	B5234T2	2.3	218	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>	

VOLVO					V70 I - V70 I 2.5 T	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>	

1997/01 - 2000/03	B5254T	2.4	193	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>

VOLVO					V70 I - V70 I R 2.3 AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>	

1997/08 - 1998/07	B5234T4	2.3	250	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
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VOLVO					V70 I - V70 I 2.5 T XC AWD	
Year	Engine	Liters	HP	System	Functions	
1997/01 - 2000/03	B5254T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>	

				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
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VOLVO				V70 I - V70 I 2.5 BI-FUEL	
Year	Engine	Liters	HP	System	Functions
1997/08 - 1999/07	GB5252S	2.4	140	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> </ul> </li> </ul>

				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
1999/08 - 2000/03	GB5244SG	2.4	140	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> </ul> </li> </ul>

- Status, steering angle sensor signal B4
- Current level LED circuit A
- Current level LED circuit B

VOLVO				V70 I - V70 I 2.5 AWD	
Year	Engine	Liters	HP	System	Functions
1999/03 - 2000/03	B5244T2	2.4	265	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>



Year	Engine	Liters	HP	System	Functions
1999/05 - 2000/03	B5244S	2.4	170	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>

VOLVO					
V70 I - V70 I T-5 AWD					
Year	Engine	Liters	HP	System	Functions
1997/01 - 2000/03	B5234T6	2.3	240	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
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VOLVO					
V70 I - V70 I 2.0 AWD Turbo					
Year	Engine	Liters	HP	System	Functions
1997/01 - 1999/07	B5204T3	2.0	226	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>

VOLVO					
V70 I - V70 I 2.0 T 20V					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> </ul> </li> </ul>

1998/08 - 2000/03	B5204T4	2.0	163	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> <ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
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VOLVO					V70 I - V70 I 2.5 T XC	
Year	Engine	Liters	HP	System	Functions	
1997/01 - 2000/03	B5254T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>	

VOLVO					V70 I - V70 I 2.3 AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>	

1998/12 - 2000/03	B5234T8	2.3	250 - 265	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>
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VOLVO					
V70 I - V70 I XC AWD					
Year	Engine	Liters	HP	System	Functions
1999/03 - 2000/03	B5244T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

					<ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul>
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VOLVO						V70 I - V70 I 2.5T					
Year	Engine	Liters	HP	System		Functions					
1999/03 - 2000/03	B5244T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- kick-down switch</li> <li>- Engine revolution</li> <li>- Winter switch</li> <li>- Oil temperature sensor gear box</li> <li>- Engine status</li> <li>- Gear selection position</li> <li>- gear box oil temperature</li> <li>- Direct transmission Converter lockup</li> <li>- Brake pedal switch</li> <li>- Gearbox input speed</li> <li>- Magnetic valve transmission oil pressure</li> <li>- Key switch position</li> <li>- Gearshift solenoid valve, status 1</li> <li>- Gearshift solenoid valve, status 2</li> <li>- Gearbox oil pressure – set value</li> <li>- Switch solenoid valve SLU</li> <li>- Solenoid shift valve SLU current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Modulation pressure, solenoid</li> <li>- Switch solenoid valve SLU</li> </ul> </li> </ul>					

VOLVO						V70 II - V70 II 2.0 T					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> </ul> </li> </ul>					

Instrument cluster  
Instrument cluster 1.0

- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**



- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status

2000/03 - 2007/07	B5204T5	2.0	179	Central electronics Front central electronics 9.12.2	<ul style="list-style-type: none"> <li>- Transponder ID received</li> <li>- Immobilizer relay status</li> <li>- Key number</li> <li>- Number of authorized keys</li> <li>- Ignition switch illuminated ring</li> <li>- Light sensor</li> <li>- Ignition key</li> <li>- Windscreen washing water level</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Lights cleaning</li> <li>- Fog light switch</li> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> <li>- Front windscreen wiper</li> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Relay terminal 15</li> <li>- Windscreen wiper switch</li> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b></li> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> </ul>
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- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay

Central electronics  
Central electronics 1.0

- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump

		<ul style="list-style-type: none"> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> </ul> </li> </ul>

				Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO				V70 II - V70 II 2.4 T	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> </ul> </li> </ul>

Instrument cluster  
Instrument cluster 1.0

- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**



Central electronics  
Front central electronics 9.12.2

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper

2000/03 - 2003/07	B5244T3	2.4	200	<ul style="list-style-type: none"> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Relay terminal 15</li> <li>- Windscreen wiper switch</li> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> </ul> </li> </ul>

- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status
  - Key number

Central electronics 1.0

- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper
  - Fog light
  - rear left el. window lifter open
  - rear left el. window lifter closed
  - rear right el. window lifter open

				<ul style="list-style-type: none"> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>

VOLVO

V70 II - V70 II 2.3 T5

Year	Engine	Liters	HP	System	Functions
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Instrument cluster  
Instrument cluster 1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Read configuration
  - Option display configuration
  - Service interval adaptation
  - Service interval display reset
  - Activate/deactivate belt warning
  - Parking brake warning tone
- **Error memory**
- **Current values**
  - Failure lamp
  - Engine revolution
  - Warning lights
  - Kilometer reading
  - Fuel level in the tank
  - Rear fog light
  - Cooling agent temperature motor
  - Airbag signal lamp
  - Cruise control, control light
  - Oil pressure control lamp
  - Generator lamp
  - Brakes control light
  - ABS control light
  - Hi-beam lights, control light
  - Trailer turn sign. indicators, warning light
  - Fuel level warning lamp
  - Glow control light
  - Vehicle speed signal
  - TCS/ESP OFF warning light
  - Airbag warning light, status
  - Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal

Gear box control  
 5-gears automatic transmission 55-  
 50/51SN1.0

- Rear left wheel, speed signal
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic



- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module

• **Actuators**

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window

2000/03  
-  
2004/07

B5234T3

2.3

250

Central electronics  
Front central electronics 9.12.2

- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right

- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model

Central electronics  
Central electronics 1.0

- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold

		<ul style="list-style-type: none"> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> </ul>

				Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
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VOLVO					V70 II - V70 II XC AWD	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> </ul>	

			<ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
		<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> </ul> </li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- Solenoid valve 1/2
- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing



Central electronics  
Front central electronics 9.12.2

- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring

<p>2000/09 - 2002/07</p>	<p>B5244T3</p>	<p>2.4</p>	<p>200</p>		<ul style="list-style-type: none"> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> </ul> </li> </ul>
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Central electronics  
Central electronics 1.0

- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status

- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Power supply
- Battery voltage

				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
				Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>

VOLVO				V70 II - V70 II 2.4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> </ul> </li> </ul>

Instrument cluster  
Instrument cluster 1.0

- Engine revolution
- Warning lights
- Kilometer reading
- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left

		<ul style="list-style-type: none"> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul>
	<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1



- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking

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Central electronics  
Front central electronics 9.12.2

- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay

- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter

Central electronics  
Central electronics 1.0

- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left

		<ul style="list-style-type: none"> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			<p>Underbody/Steering Adap. suspension sys. 2.0</p>	
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> </ul> </li> </ul>

Instrument cluster  
Instrument cluster 1.0

- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch



Gear box control  
 5-gears automatic transmission 55-  
 50/51SN2.0

- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status

2003/04 - 2006/07	B5244S6	2.4	170	Central electronics Front central electronics 9.12.2	<ul style="list-style-type: none"> <li>- Transponder ID received</li> <li>- Immobilizer relay status</li> <li>- Key number</li> <li>- Number of authorized keys</li> <li>- Ignition switch illuminated ring</li> <li>- Light sensor</li> <li>- Ignition key</li> <li>- Windscreen washing water level</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Lights cleaning</li> <li>- Fog light switch</li> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> <li>- Front windscreen wiper</li> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Relay terminal 15</li> <li>- Windscreen wiper switch</li> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b></li> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> </ul>
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- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay

Central electronics  
Central electronics 1.0

- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump

		<ul style="list-style-type: none"> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> </ul> </li> </ul>

				<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO					V70 II - V70 II 2.5D	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> </ul> </li> </ul>	

Instrument cluster  
Instrument cluster 1.0

- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**



Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**

Central electronics  
Front central electronics 9.12.2

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper

<p>2000/03 - 2001/07</p>	<p>D5252T</p>	<p>2.5</p>	<p>140</p>	<ul style="list-style-type: none"> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Relay terminal 15</li> <li>- Windscreen wiper switch</li> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b></li> </ul>				

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status

Central electronics  
Central electronics 1.0

- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper
  - Fog light
  - rear left el. window lifter open
  - rear left el. window lifter closed

				<ul style="list-style-type: none"> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>

VOLVO

V70 II - V70 II 2.4D

Year	Engine	Liters	HP	System	Functions
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			<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
			<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> </ul> </li> </ul>

Gear box control  
 5-gears automatic transmission 55-  
 50/51SN1.0

- Rear left wheel, speed signal
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5



Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic

- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module

• **Actuators**

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window

2001/08  
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2.4

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Central electronics  
Front central electronics 9.12.2

- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right

- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model

Central electronics  
Central electronics 1.0

- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold

				<ul style="list-style-type: none"> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
		<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
		<p>Steering wheel rotation angle sensor</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> </ul> </li> </ul>

			Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul>
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> </ul> </li> </ul>

Instrument cluster  
Instrument cluster 1.0

- Service interval adaptation
- Service interval display reset
- Activate/deactivate belt warning
- Parking brake warning tone
- **Error memory**
- **Current values**
  - Failure lamp
  - Engine revolution
  - Warning lights
  - Kilometer reading
  - Fuel level in the tank
  - Rear fog light
  - Cooling agent temperature motor
  - Airbag signal lamp
  - Cruise control, control light
  - Oil pressure control lamp
  - Generator lamp
  - Brakes control light
  - ABS control light
  - Hi-beam lights, control light
  - Trailer turn sign. indicators, warning light
  - Fuel level warning lamp
  - Glow control light
  - Vehicle speed signal
  - TCS/ESP OFF warning light
  - Airbag warning light, status
  - Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature



		<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul>
	<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> <li>• <b>Special functions</b></li> <li>- Start gear indicator mode</li> <li>- Start test mode</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> <li>• <b>Actuators</b></li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic
  - Geartronic -
  - Winter mode
  - Gear ratio actual value
  - Gear ratio set value
  - Start release by selector lever module

- **Actuators**

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**

- **Clear errors**

- **Functional tests**

- Alternator voltage functional test

- **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

- **Error memory**

- **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay

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Central electronics  
Front central electronics 9.12.2

- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump

- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal

Central electronics  
Central electronics 1.0

- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2

		<ul style="list-style-type: none"> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

			<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>



Instrument cluster  
Instrument cluster 1.0

- Failure lamp
- Engine revolution
- Warning lights
- Kilometer reading
- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right

- Inlet valve: rear left
- Exhaust valve: rear right
- Exhaust valve: rear left
- Pump motor

Gear box control  
5-gears automatic transmission 55-50/51SN2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value

					<ul style="list-style-type: none"> <li>- Set value, solenoid valve, torque conv. lock-up</li> <li>- Converter bridging solenoid valve actual pressure</li> <li>- Geartronic</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
<p>2006/08 - 2007/07</p>	<p>D5244T7</p>	<p>2.4</p>	<p>126</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> </ul> </li> </ul>

Central electronics  
Front central electronics 9.12.2

- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights

		<ul style="list-style-type: none"> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
	<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act. current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO					
V70 II - V70 II 2.5 BI-FUEL CNG					
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Parking brake, control light</li> <li>• <b>Actuators</b></li> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- ABS test</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>• <b>Actuators</b></li> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> <li>• <b>Special functions</b></li> <li>- Start gear indicator mode</li> <li>- Start test mode</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- kick-down switch
- Solenoid valve 1/2
- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error



Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear

- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status
  - Key number
  - Number of authorized keys
  - Ignition switch illuminated ring
  - Light sensor
  - Ignition key
  - Windscreen washing water level
  - Emergency lights switch
  - Front fog lights relay
  - Lights cleaning
  - Fog light switch
  - Indicator light, hazard warning lights system

Central electronics  
Front central electronics 9.12.2

- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status

Central electronics  
Central electronics 1.0

- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper
  - Fog light

		<ul style="list-style-type: none"> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
	Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO					
V70 II - V70 II 2.5 BI-FUEL LPG					
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
		<p>Anti-block system ABS Teves Mk25 VER2</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> </ul> </li> </ul>



Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- Solenoid valve 1/2
- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

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Central electronics  
Front central electronics 9.12.2

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper

- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

- **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

- **Error memory**

- **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received

Central electronics  
Central electronics 1.0

- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper
  - Fog light
  - rear left el. window lifter open

				<ul style="list-style-type: none"> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Sports mode LED</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO					V70 II - V70 II 2.5 T AWD	
Year	Engine	Liters	HP	System	Functions	
				<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>	



		<ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> </ul> </li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2

Gear box control  
 5-gears automatic transmission 55-50/51SN2.0

- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**

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Central electronics  
Front central electronics 9.12.2

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer

- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status

Central electronics  
Central electronics 1.0

- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper
  - Fog light
  - rear left el. window lifter open
  - rear left el. window lifter closed

					<ul style="list-style-type: none"> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

VOLVO					V70 II - V70 II 2.4D AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> </ul> </li> </ul>	



Instrument cluster  
Instrument cluster 1.0

- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- Start gear indicator mode
- Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch

Gear box control  
 5-gears automatic transmission 55-  
 50/51SN2.0

- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on

Central electronics  
Front central electronics 9.12.2

- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring

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- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper
  - Fog light
  - rear left el. window lifter open
  - rear left el. window lifter closed
  - rear right el. window lifter open
  - rear right el. window lifter closed
  - Relay for parking lights

- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status

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- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay

				<ul style="list-style-type: none"> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
		Steering wheel rotation angle sensor Steering angle sensor 1.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
		Steering wheel rotation angle sensor Steering angle sensor 2.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
		Underbody/Steering Adap. suspension sys. 2.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act. current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul>
			Additional heater Auxiliary/supplementary heater 2.0		<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul>

VOLVO					V70 II - V70 II R 2.5 T AWD	
Year	Engine	Liters	HP	System	Functions	
					<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> </ul>	

Instrument cluster  
Instrument cluster 1.0

- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- Start gear indicator mode
- Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch

Gear box control  
 5-gears automatic transmission 55-  
 50/51SN2.0

- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on

- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring

Central electronics  
Front central electronics 9.12.2

2003/03  
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2.5

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- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper
  - Fog light
  - rear left el. window lifter open
  - rear left el. window lifter closed
  - rear right el. window lifter open
  - rear right el. window lifter closed
  - Relay for parking lights

- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status

Central electronics  
Central electronics 1.0

- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay



				<ul style="list-style-type: none"> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
		<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
		<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
		<p>Underbody/Steering Adap. suspension sys. 2.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul>

VOLVO				V70 II - V70 II 2.5 T	
Year	Engine	Liters	HP	System	Functions
					<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> </ul>

Instrument cluster  
Instrument cluster 1.0

- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- Start gear indicator mode
- Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5
- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature

Gear box control  
 5-gears automatic transmission 55-  
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- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter

Central electronics  
Front central electronics 9.12.2

- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor

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- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper
  - Fog light
  - rear left el. window lifter open
  - rear left el. window lifter closed
  - rear right el. window lifter open
  - rear right el. window lifter closed
  - Relay for parking lights
  - Relay for low-beam headlights

- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status



Central electronics  
Central electronics 1.0

- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay

		<ul style="list-style-type: none"> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
	<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act. current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul>
			Additional heater Auxiliary/supplementary heater 2.0		<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul>

VOLVO				V70 II - V70 II 2.4 T5	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> </ul>

Instrument cluster 1.0

- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode

Gear box control  
5-gears automatic transmission 55-  
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- Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter

Central electronics  
Front central electronics 9.12.2

- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor

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- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper
  - Fog light
  - rear left el. window lifter open
  - rear left el. window lifter closed
  - rear right el. window lifter open
  - rear right el. window lifter closed
  - Relay for parking lights
  - Relay for low-beam headlights



- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status

Central electronics  
Central electronics 1.0

- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay

				<ul style="list-style-type: none"> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act. current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul>
			Additional heater Auxiliary/supplementary heater 2.0		<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul>

VOLVO					V70 II - V70 II D5	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> </ul>	

		<ul style="list-style-type: none"> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic
  - Geartronic -
  - Winter mode
  - Gear ratio actual value
  - Gear ratio set value
  - Start release by selector lever module
- **Actuators**
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3

2005/12 - 2006/07	D5244T3	2.4	185	<ul style="list-style-type: none"> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> <li>- Rear left window</li> <li>- Rear right window</li> <li>- Childproof lock relay</li> <li>- Main beam relay</li> <li>- Low-beam relay</li> <li>- Stand light relay</li> <li>- Relay, daytime running lights</li> <li>- Front left door status</li> <li>- Front right door status</li> <li>- Rear left door status</li> </ul> </li> </ul>

Central electronics  
Front central electronics 9.12.2

- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights



		<ul style="list-style-type: none"> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
	<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>
			<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing

2006/08  
-  
2007/07

D5244T4

2.4

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Central electronics  
Front central electronics 9.12.2

- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring

	<ul style="list-style-type: none"> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> </ul> </li> </ul>

				<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO				V70 II - V70 II D5 AWD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> </ul> </li> </ul>

Instrument cluster  
Instrument cluster 1.0

- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic



				<ul style="list-style-type: none"> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Winter mode</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>	
<p>2005/12 - 2006/07</p>	<p>D5244T3</p>	<p>2.4</p>	<p>185</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> </ul> </li> </ul>

Central electronics  
Front central electronics 9.12.2

- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left

		<ul style="list-style-type: none"> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
	<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> <li>• <b>Actuators</b></li> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul>
			<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> <li>• <b>Actuators</b></li> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> </ul>

			<ul style="list-style-type: none"> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
		<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> </ul> </li> </ul>

2006/08  
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2007/07

D5244T4

2.4

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Central electronics  
Front central electronics 9.12.2

- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor

		<ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Relay terminal 15</li> <li>- Windscreen wiper switch</li> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul>

				<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO					V70 II - V70 II 2.4 T AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> </ul> </li> </ul>	



Instrument cluster  
Instrument cluster 1.0

- Service interval adaptation
- Service interval display reset
- Activate/deactivate belt warning
- Parking brake warning tone
- **Error memory**
- **Current values**
  - Failure lamp
  - Engine revolution
  - Warning lights
  - Kilometer reading
  - Fuel level in the tank
  - Rear fog light
  - Cooling agent temperature motor
  - Airbag signal lamp
  - Cruise control, control light
  - Oil pressure control lamp
  - Generator lamp
  - Brakes control light
  - ABS control light
  - Hi-beam lights, control light
  - Trailer turn sign. indicators, warning light
  - Fuel level warning lamp
  - Glow control light
  - Vehicle speed signal
  - TCS/ESP OFF warning light
  - Airbag warning light, status
  - Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

		<ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
	<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b></li> </ul>

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status

2000/09 - 2003/07	B5244T3	2.4	200	Central electronics Front central electronics 9.12.2	<ul style="list-style-type: none"> <li>- Key number</li> <li>- Number of authorized keys</li> <li>- Ignition switch illuminated ring</li> <li>- Light sensor</li> <li>- Ignition key</li> <li>- Windscreen washing water level</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Lights cleaning</li> <li>- Fog light switch</li> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> <li>- Front windscreen wiper</li> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Relay terminal 15</li> <li>- Windscreen wiper switch</li> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> </ul> </li> </ul>
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- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights

Central electronics  
Central electronics 1.0

- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights

		<ul style="list-style-type: none"> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
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VOLVO					V70 II - V70 II 2.3	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> </ul>	



Anti-block system  
ABS Teves Mk25 VER2

- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

Gear box control  
5-gears automatic transmission 55-  
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position

- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window

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Central electronics  
Front central electronics 9.12.2

- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right

- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model

Central electronics  
Central electronics 1.0

- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold

		<ul style="list-style-type: none"> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

				<p>Underbody/Steering Adap. suspension sys. 2.0</p> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Switch illumination</li> <li>- ADVANCED program lamp</li> <li>- COMFORT program lamp</li> <li>- Sensor power supply 1</li> <li>- Sensor power supply 2</li> <li>- Longitudinal acceleration sensor front left</li> <li>- Longitudinal acceleration sensor front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Gearbox shift mode, switch</li> <li>- Sports mode LED</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Front left damper valve 1</li> <li>- Front right damper valve 1</li> <li>- Rear left damper valve 1</li> <li>- Rear right damper valve 1</li> </ul> </li> </ul>
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VOLVO				V70 III - V70 III 3.2	
Year	Engine	Liters	HP	System	Functions
				<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
<p style="text-align: center;">Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> </ul> </li> </ul>



				<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
			Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
			Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>

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Central electronics  
Central electronics 3.0

- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch

				<ul style="list-style-type: none"> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

Underbody/Steering  
Adaptive damping system 3.0

- Car level (horizontality) sensor output: rear left
- Car level (horizontality) sensor output: rear right
- Car level (horizontality) sensor output: front left
- Electronic control unit supply voltage
- Control unit, Voltage sensor 1
- Control unit, Voltage sensor 2
- Front left damper valve resistance
- Front right damper valve resistance
- Rear left damper valve resistance
- Rear right damper valve resistance
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve act. current
- Vehicle level sensor, front right
- Front left damper valve actuation
- Front right damper valve actuation
- Rear left damper valve actuation
- Rear right damper valve actuation
- Damper mode
- Front right acceleration sensor power supply
- Front left acceleration sensor power supply
- Rear left acceleration sensor power supply
- Front left damper status
- Front right damper status
- Rear left damper status
- Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature
  - Auxiliary/supplementary heater operating time
  - Auxiliary/supplementary heater heating time
  - Electronic control unit power supply
  - Glow plug
  - Combustion air blower actuation
  - Combustion air blower
  - Supplem./auxiliary heater fuel pump
  - Central electronics power supply

Parking assisting system  
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Reverse gear
  - Trailer detection
  - Distance, left front, outside
  - Distance, left front, inside
  - Distance, right front, inside
  - Distance, right front, outside
  - Vehicle drive status
  - Rear left outer distance
  - Rear left inner distance
  - Rear right outer distance
  - Rear right inner distance
  - Distance sensors

					<ul style="list-style-type: none"> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
			Anti-block system ESP Teves Mk25 E1		
			Electrical energy management Battery management 3.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> </ul> </li> </ul>

				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> </ul> </li> </ul>
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Central electronics  
Central electronics 3.0

- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +



		<ul style="list-style-type: none"> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
		<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> </ul>

				Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				V70 III - V70 III 2.5 T	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30

Gear box control  
6-gears automatic transmission TF80SC

- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Power supply
- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2
- **Error memory**
- **Current values**
- Power supply
- Actuations during vehicle operation
- Inclination sensor
- Parking brake button
- Left control motor, current input
- Right control motor, current input
- Parking brake status, left

				<ul style="list-style-type: none"> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
2007/08 - 2010/07	B5254T6	2.5	200	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

Immobilizer  
Access system/immobilizer 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Number of registered master keys
  - Number of registered slave keys
  - Front left door handle button
  - Front right door handle button
  - Rear right door handle button
  - Rear lid exterior antenna
  - Front interior antenna
  - Rear interior antenna
  - Rear left door handle button
  - Rear right antenna
  - Rear left antenna
  - Start/Stop button
  - Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontality) sensor output: rear left
  - Car level (horizontality) sensor output: rear right
  - Car level (horizontality) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act. current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature

			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> </ul> </li> </ul>



		<ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
<p>Parking brake Electrical parking brake 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Functional tests</b></p> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> <p><b>• Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuations during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>

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Central electronics  
Central electronics 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
  - Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor

- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch

					<ul style="list-style-type: none"> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
				<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act. current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
				<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> </ul> </li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	

					<ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				V70 III - V70 III T6 AWD	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
			<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor
  - Parking brake, control light
  - Actuation counter
  - Left parking brake request
  - Right parking brake request
  - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
  - Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch



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Central electronics  
Central electronics 3.0

- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering

		<ul style="list-style-type: none"> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
		<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> </ul>

				<ul style="list-style-type: none"> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Underbody/Steering Adaptive damping system 3.0</p>	
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection

		<ul style="list-style-type: none"> <li>- Battery charge/discharge current</li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
			Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> </ul> </li> </ul>
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Central electronics  
Central electronics 3.0

- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light

		<ul style="list-style-type: none"> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> </ul>



					<ul style="list-style-type: none"> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				V70 III - V70 III 2.4D	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b></li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch

Gear box control  
6-gears automatic transmission TF80SC

- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor

				<ul style="list-style-type: none"> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
2007/08 - 2009/07	D5244T5	2.4	163	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> <li>- Time: Fourth last alarm triggering</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**

Immobilizer  
Access system/immobilizer 3.0

- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Number of registered master keys
  - Number of registered slave keys
  - Front left door handle button
  - Front right door handle button
  - Rear right door handle button
  - Rear lid exterior antenna
  - Front interior antenna
  - Rear interior antenna
  - Rear left door handle button
  - Rear right antenna
  - Rear left antenna
  - Start/Stop button
  - Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontal) sensor output: rear left
  - Car level (horizontal) sensor output: rear right
  - Car level (horizontal) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status

			Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
			Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
			Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>



			<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
			<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuations during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> </ul> </li> </ul>

2009/08  
-  
2010/07

D5244T14

2.4

175

Central electronics  
Central electronics 3.0

- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering

		<ul style="list-style-type: none"> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
		<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> </ul>

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> </ul> </li> </ul>

Gear box control  
6-gears automatic transmission TF80SC

- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Power supply
- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2
- **Error memory**

2007/08 - 2009/07	D5244T4	2.4	185	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper



		<ul style="list-style-type: none"> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
				<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> </ul> </li> </ul>

Gear box control  
6-gears automatic transmission TF80SC

- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Power supply
- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2
- **Error memory**
- **Current values**
- Power supply
- Actuations during vehicle operation
- Inclination sensor
- Parking brake button
- Left control motor, current input
- Right control motor, current input
- Parking brake status, left

				<ul style="list-style-type: none"> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
<p>2009/08 - 2011/07</p>	<p>D5244T10</p>	<p>2.4</p>	<p>205</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

Immobilizer  
Access system/immobilizer 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Number of registered master keys
  - Number of registered slave keys
  - Front left door handle button
  - Front right door handle button
  - Rear right door handle button
  - Rear lid exterior antenna
  - Front interior antenna
  - Rear interior antenna
  - Rear left door handle button
  - Rear right antenna
  - Rear left antenna
  - Start/Stop button
  - Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontal) sensor output: rear left
  - Car level (horizontal) sensor output: rear right
  - Car level (horizontal) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act. current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage

			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> </ul> </li> </ul>



		<ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b></li> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Release parking brake</li> <li>- Parking brake apply</li> <li>• <b>Adjustments / settings</b></li> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>

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Central electronics  
Central electronics 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
  - Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor

- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch

<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					V70 III - V70 III 3.2 AWD	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> </ul> </li> </ul>	

				<ul style="list-style-type: none"> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
			<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor
  - Parking brake, control light
  - Actuation counter
  - Left parking brake request
  - Right parking brake request
  - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
  - Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level



<p>2007/08 - 2010/07</p>	<p>B6324S</p>	<p>3.2</p>	<p>238</p>	<p>Central electronics Central electronics 3.0</p>	<ul style="list-style-type: none"> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> <li>- Time: Fourth last alarm triggering</li> <li>- Tank flap unlocking relay</li> <li>- Rear fog light relay</li> <li>- Windscreen washer system switch</li> <li>- Center stop lamp actuation</li> <li>- Fog light switch</li> <li>- Rain sensor</li> <li>- Wiper switch</li> <li>- Light sensor</li> <li>- Rear fog lights switch</li> <li>- Washer fluid level monitoring</li> <li>- Backup lights</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery voltage monitoring</li> <li>- Battery power consumption</li> <li>- Operating time in minutes</li> <li>- No-load current mean value</li> <li>- Age of the vehicle in days</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Clutch pedal position</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> </ul>
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				<ul style="list-style-type: none"> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Underbody/Steering Adaptive damping system 3.0</p>	
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection

Gear box control  
6-gears automatic transmission TF80SC

- Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed

				<ul style="list-style-type: none"> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
			<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> </ul> </li> </ul>
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Central electronics  
Central electronics 3.0

- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light

		<ul style="list-style-type: none"> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act. current</li> <li>- Rear left damper valve act. current</li> </ul>



					<ul style="list-style-type: none"> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					V70 III - V70 III D5 AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b></li> </ul>	

Anti-block system  
ESP Teves Mk25 E1

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
- Bleed
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

- **Identification**
- **Clear errors**
- **Adjustments / settings**
- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
- Start gear indicator mode
- **Error memory**
- **Current values**
- Accelerator pedal position
- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch

Gear box control  
6-gears automatic transmission TF80SC

- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor
  - Parking brake, control light

				<ul style="list-style-type: none"> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
2007/10 - 2009/07	D5244T4	2.4	185	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> <li>- Time: Fourth last alarm triggering</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**

<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> </ul> </li> </ul>



		<ul style="list-style-type: none"> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> </ul>

2009/08  
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Central electronics  
Central electronics 3.0

- Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring

- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left

<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> </ul>

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Central electronics  
Central electronics 3.0

- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA



	<ul style="list-style-type: none"> <li>- Battery voltage monitoring</li> <li>- Battery power consumption</li> <li>- Operating time in minutes</li> <li>- No-load current mean value</li> <li>- Age of the vehicle in days</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Clutch pedal position</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
			Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
			Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>

				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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VOLVO				V70 III - V70 III 2.0 F Flexifuel	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current

		<ul style="list-style-type: none"> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> </ul> </li> </ul>

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Central electronics  
Central electronics 3.0

- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value

- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna

Immobilizer  
Access system/immobilizer 3.0

		<ul style="list-style-type: none"> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act. current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
	<p>Parking assisting system</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> </ul> </li> </ul>



				Park Distance Control 3.0	<ul style="list-style-type: none"> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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**VOLVO** **V70 III - V70 III 2.0B**

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- rear right tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> </ul>

Electrical energy management  
Battery management 3.0

• **Current values**

- Battery voltage
- Battery charging status
- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current

• **Actuators**

- Gear shift solenoid valve 1

		<ul style="list-style-type: none"> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b></li> </ul>

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Central electronics  
Central electronics 3.0

- Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position

- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

**• Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

Immobilizer  
Access system/immobilizer 3.0

**• Identification**

**• Clear errors**

**• Error memory**

**• Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontality) sensor output: rear left
  - Car level (horizontality) sensor output: rear right
  - Car level (horizontality) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature
  - Auxiliary/supplementary heater operating time
  - Auxiliary/supplementary heater heating time
  - Electronic control unit power supply
  - Glow plug
  - Combustion air blower actuation
  - Combustion air blower
  - Supplem./auxiliary heater fuel pump
  - Central electronics power supply

Parking assisting system  
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Reverse gear
  - Trailer detection
  - Distance, left front, outside
  - Distance, left front, inside
  - Distance, right front, inside
  - Distance, right front, outside
  - Vehicle drive status
  - Rear left outer distance

					<ul style="list-style-type: none"> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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<b>VOLVO</b>	<b>V70 III - V70 III 2.0D</b>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b></li> </ul>

Gear box control  
6-gears automatic transmission TF80SC

- Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**



2007/10 - 2010/07	D4204T	2.0	136	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> </ul> </li> </ul>
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Central electronics  
Central electronics 3.0

- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1

		<ul style="list-style-type: none"> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					V70 III - V70 III 2.5 FT Flexifuel	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>	

Anti-block system  
ESP Teves Mk25 E1

- Vehicle driving speed
- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1

		<ul style="list-style-type: none"> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> </ul>

2008/05  
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2009/07

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Central electronics  
Central electronics 3.0

- Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring

- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left



<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act. current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Central electronics power supply</li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				V70 III - V70 III 1.6D DRIVe	
Year	Engine	Liters	HP	System	Functions
				<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuations during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> </ul> </li> </ul>

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Central electronics  
Central electronics 3.0

- Sun roof initialization
- Reset crash detection signal
- Rear wiper with reverse gear
- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA

Immobilizer  
Access system/immobilizer 3.0

- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject
- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Number of registered master keys
  - Number of registered slave keys
  - Front left door handle button

	<ul style="list-style-type: none"> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

					<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
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<b>VOLVO</b>	<b>V70 III - V70 III 2.5 FT Fexifuel</b>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> </ul> </li> </ul>



		<ul style="list-style-type: none"> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> </ul> </li> </ul>

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Central electronics  
Central electronics 3.0

- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA

	<ul style="list-style-type: none"> <li>- Battery voltage monitoring</li> <li>- Battery power consumption</li> <li>- Operating time in minutes</li> <li>- No-load current mean value</li> <li>- Age of the vehicle in days</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Clutch pedal position</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> </ul> </li> </ul>

				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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<b>VOLVO</b>	<b>V70 III - V70 III 2.0 T</b>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation               <ul style="list-style-type: none"> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

Electrical energy management  
Battery management 3.0

- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current

		<ul style="list-style-type: none"> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> </ul> </li> </ul>



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Central electronics  
Central electronics 3.0

- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value

- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

Immobilizer  
Access system/immobilizer 3.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna

				<ul style="list-style-type: none"> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> </ul> </li> </ul>

				Park Distance Control 3.0	<ul style="list-style-type: none"> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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VOLVO				V70 III - V70 III D3	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b></li> </ul>

Electrical energy management  
Battery management 3.0

- Battery voltage
- Battery charging status
- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2

		<ul style="list-style-type: none"> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> </ul>

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Central electronics  
Central electronics 3.0

- **Error memory**

- **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay

Immobilizer  
Access system/immobilizer 3.0

- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

**• Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

**• Identification**

**• Clear errors**

**• Error memory**

**• Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

**• Identification**



Underbody/Steering  
Adaptive damping system 3.0

- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontality) sensor output: rear left
  - Car level (horizontality) sensor output: rear right
  - Car level (horizontality) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature
  - Auxiliary/supplementary heater operating time
  - Auxiliary/supplementary heater heating time
  - Electronic control unit power supply
  - Glow plug
  - Combustion air blower actuation
  - Combustion air blower
  - Supplem./auxiliary heater fuel pump
  - Central electronics power supply

Parking assisting system  
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Reverse gear
  - Trailer detection
  - Distance, left front, outside
  - Distance, left front, inside
  - Distance, right front, inside
  - Distance, right front, outside
  - Vehicle drive status
  - Rear left outer distance
  - Rear left inner distance

				<ul style="list-style-type: none"> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> </ul> </li> </ul>

			<ul style="list-style-type: none"> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
		<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
		<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> </ul>

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Central electronics  
Central electronics 3.0

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right

- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

Immobilizer  
Access system/immobilizer 3.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontality) sensor output: rear left
  - Car level (horizontality) sensor output: rear right
  - Car level (horizontality) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature
  - Auxiliary/supplementary heater operating time
  - Auxiliary/supplementary heater heating time
  - Electronic control unit power supply
  - Glow plug
  - Combustion air blower actuation
  - Combustion air blower
  - Supplem./auxiliary heater fuel pump
  - Central electronics power supply

Parking assisting system  
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Reverse gear
  - Trailer detection
  - Distance, left front, outside
  - Distance, left front, inside
  - Distance, right front, inside
  - Distance, right front, outside
  - Vehicle drive status

					<ul style="list-style-type: none"> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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VOLVO				V70 III - V70 III T5	
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> </ul> </li> </ul>

Electrical energy management  
Battery management 3.0

- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1



		<ul style="list-style-type: none"> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

2010/08

B4204T7

2.0

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Central electronics  
Central electronics 3.0

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch

				<ul style="list-style-type: none"> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> <li><b>• Identification</b></li> <li><b>• Clear errors</b></li> <li><b>• Error memory</b></li> <li><b>• Current values</b></li> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
				<ul style="list-style-type: none"> <li><b>• Identification</b></li> <li><b>• Clear errors</b></li> <li><b>• Error memory</b></li> </ul>

Underbody/Steering  
Adaptive damping system 3.0

• **Current values**

- Car level (horizontality) sensor output: rear left
- Car level (horizontality) sensor output: rear right
- Car level (horizontality) sensor output: front left
- Electronic control unit supply voltage
- Control unit, Voltage sensor 1
- Control unit, Voltage sensor 2
- Front left damper valve resistance
- Front right damper valve resistance
- Rear left damper valve resistance
- Rear right damper valve resistance
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve act. current
- Vehicle level sensor, front right
- Front left damper valve actuation
- Front right damper valve actuation
- Rear left damper valve actuation
- Rear right damper valve actuation
- Damper mode
- Front right acceleration sensor power supply
- Front left acceleration sensor power supply
- Rear left acceleration sensor power supply
- Front left damper status
- Front right damper status
- Rear left damper status
- Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Fuel warming up
- Total run
- Coolant temperature
- Battery voltage
- Passenger compartment temperature
- Starter
- Operating status
- Additional cooling fluid pump
- Glow plugs control
- Ambient temperature
- Auxiliary/supplementary heater operating time
- Auxiliary/supplementary heater heating time
- Electronic control unit power supply
- Glow plug
- Combustion air blower actuation
- Combustion air blower
- Supplem./auxiliary heater fuel pump
- Central electronics power supply

Parking assisting system  
Park Distance Control 3.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Power supply
- Reverse gear
- Trailer detection
- Distance, left front, outside
- Distance, left front, inside
- Distance, right front, inside
- Distance, right front, outside
- Vehicle drive status
- Rear left outer distance
- Rear left inner distance
- Rear right outer distance
- Rear right inner distance

- Distance sensors
- Front Park Distance Control
- Rear Park Distance Control

VOLVO				V70 III - V70 III T4	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
				Electrical energy management	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> </ul> </li> </ul>

Battery management 3.0

- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor
  - Parking brake, control light
  - Actuation counter
  - Left parking brake request
  - Right parking brake request
  - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
  - Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level

2010/08 -	B4164T	1.6	180	<p>Central electronics Central electronics 3.0</p>	<ul style="list-style-type: none"> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> <li>- Time: Fourth last alarm triggering</li> <li>- Tank flap unlocking relay</li> <li>- Rear fog light relay</li> <li>- Windscreen washer system switch</li> <li>- Center stop lamp actuation</li> <li>- Fog light switch</li> <li>- Rain sensor</li> <li>- Wiper switch</li> <li>- Light sensor</li> <li>- Rear fog lights switch</li> <li>- Washer fluid level monitoring</li> <li>- Backup lights</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery voltage monitoring</li> <li>- Battery power consumption</li> <li>- Operating time in minutes</li> <li>- No-load current mean value</li> <li>- Age of the vehicle in days</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Clutch pedal position</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> </ul>
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- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

Immobilizer  
Access system/immobilizer 3.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Car level (horizontality) sensor output: rear left
- Car level (horizontality) sensor output: rear right
- Car level (horizontality) sensor output: front left

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supple./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
				Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
			<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

2011/08 -	D4162T	1.6	114	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply

- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

Immobilizer  
Access system/immobilizer 3.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Car level (horizontality) sensor output: rear left
- Car level (horizontality) sensor output: rear right
- Car level (horizontality) sensor output: front left
- Electronic control unit supply voltage
- Control unit, Voltage sensor 1
- Control unit, Voltage sensor 2
- Front left damper valve resistance

				<p>Underbody/Steering Adaptive damping system 3.0</p> <ul style="list-style-type: none"> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

**VOLVO**

**V70 III - V70 III T4F**

Year	Engine	Liters	HP	System	Functions
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Anti-block system  
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value

		<ul style="list-style-type: none"> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Underbody/Steering</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> </ul> </li> </ul>

				Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
				Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuations during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> </ul> </li> </ul>
2011/08	B4164T2	1.6	180		

Central electronics  
Central electronics 3.0

- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status

		<ul style="list-style-type: none"> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
	<p>Underbody/Steering</p>	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> </ul>

				Adaptive damping system 3.0	<ul style="list-style-type: none"> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				V70 III - V70 III 2.0 D4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**

Gear box control  
6-gears automatic transmission TF80SC

- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor



					<ul style="list-style-type: none"> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> </ul> </li> </ul>
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Central electronics  
Central electronics 3.0

- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2

		<ul style="list-style-type: none"> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act. current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				V70 III - V70 III 2.0 T5	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset

Gear box control  
6-gears automatic transmission TF80SC

- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
<p>2012/08 -</p>	<p>B5204T9</p>	<p>2.0</p>	<p>214</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5



		<ul style="list-style-type: none"> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					V70 III - V70 III D4 AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> </ul>	

Anti-block system  
ESP Teves Mk25 E1

- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**

Gear box control  
6-gears automatic transmission TF80SC

- Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>- Parking brake apply</li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
<p>2012/08 -</p>	<p>D5244T17</p>	<p>2.4</p>	<p>163</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2

				<ul style="list-style-type: none"> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
			<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				XC60 - XC60 D5 AWD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> </ul> </li> </ul>



Anti-block system  
ESP Teves Mk25 E1

- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2

		<ul style="list-style-type: none"> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Functional tests</b></p> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> <p><b>• Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuations during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
		<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Functional tests</b></p> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> <p><b>• Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> <p><b>• Special functions</b></p> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> <p><b>• Error memory</b></p>

2009/03  
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2009/07

D5244T4

2.4

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Central electronics  
Central electronics 3.0

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch

	<ul style="list-style-type: none"> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p>

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> </ul>

				<ul style="list-style-type: none"> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>

2009/08 - 2011/07	D5244T10	2.4	205	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> </ul> </li> </ul>



Central electronics  
Central electronics 3.0

- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply

		<ul style="list-style-type: none"> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
		<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> </ul>

				<p>Underbody/Steering Adaptive damping system 3.0</p> <ul style="list-style-type: none"> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Error memory**

			<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
			<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> </ul> </li> </ul>

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Central electronics  
Central electronics 3.0

- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay

				<ul style="list-style-type: none"> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
		<p>Immobilizer Access system/immobilizer 3.0</p>		<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
				<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> </ul>

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supple./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>



Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> </ul> </li> </ul>

Gear box control  
6-gears automatic transmission TF80SC

- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor
  - Parking brake, control light
  - Actuation counter
  - Left parking brake request
  - Right parking brake request
  - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**

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Central electronics  
Central electronics 3.0

- Alternator voltage functional test
- Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch

- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left

<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act. current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Central electronics power supply</li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> </ul> </li> </ul>



2009/08  
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2011/07

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Central electronics  
Central electronics 3.0

- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering

				<ul style="list-style-type: none"> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
		<p>Immobilizer Access system/immobilizer 3.0</p>		<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
				<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> </ul>

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act. current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> </ul> </li> </ul>

Gear box control  
6-gears automatic transmission TF80SC

- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2
- **Error memory**
- **Current values**
- Power supply
- Actuators during vehicle operation
- Inclination sensor
- Parking brake button
- Left control motor, current input
- Right control motor, current input
- Parking brake status, left
- Parking brake status, right
- Clutch pedal position
- Rear outer friction pad wearout sensor
- Parking brake, control light
- Actuation counter
- Left parking brake request
- Right parking brake request
- Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**

2009/03  
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2010/07

B6304T2

3.0

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Central electronics  
Central electronics 3.0

- Alternator voltage functional test
- Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch

- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch

<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> </ul> </li> </ul>



				<ul style="list-style-type: none"> <li>- Central electronics power supply</li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> </ul> </li> </ul>

Electrical energy management  
Battery management 3.0

- Rear right brake disc temperature
- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic

		<ul style="list-style-type: none"> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- Warning lights</li> <li>- Steering wheel rotational speed</li> <li>- Current consumption pump motor</li> <li>- Pump motor nominal speed</li> <li>- Actual speed, pump motor</li> <li>- Output stage temperature</li> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuations during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> </ul> </li> </ul>

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3.0

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Central electronics  
Central electronics 3.0

- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption

	<ul style="list-style-type: none"> <li>- Operating time in minutes</li> <li>- No-load current mean value</li> <li>- Age of the vehicle in days</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Clutch pedal position</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> </ul>

		<ul style="list-style-type: none"> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> </ul> </li> </ul>

				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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<b>VOLVO</b>	<b>XC60 - XC60 2.4D DRIVe</b>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

Gear box control  
6-gears automatic transmission TF80SC

- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Parking brake

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor



				<p>Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
<p>2009/08 - 2010/07</p>	<p>D5244T14</p>	<p>2.4</p>	<p>175</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof

				<ul style="list-style-type: none"> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
			<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> </ul> </li> </ul>

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				XC60 - XC60 3.2 AWD	
Year	Engine	Liters	HP	System	Functions
				<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> </ul> </li> </ul>

Gear box control  
6-gears automatic transmission TF80SC

- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2
- **Error memory**
- **Current values**
- Power supply
- Actuations during vehicle operation
- Inclination sensor
- Parking brake button
- Left control motor, current input
- Right control motor, current input
- Parking brake status, left
- Parking brake status, right
- Clutch pedal position
- Rear outer friction pad wearout sensor
- Parking brake, control light
- Actuation counter
- Left parking brake request
- Right parking brake request
- Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- Brake light/brake pedal position switch
- **Adjustments / settings**
- Start mode

2009/08  
-  
2010/07

B6324S

3.2

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Central electronics  
Central electronics 3.0

- Program sensor code (activator)
- Sun roof initialization
- Reset crash detection signal
- Rear wiper with reverse gear
- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA

	<ul style="list-style-type: none"> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery voltage monitoring</li> <li>- Battery power consumption</li> <li>- Operating time in minutes</li> <li>- No-load current mean value</li> <li>- Age of the vehicle in days</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Clutch pedal position</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> </ul> </li> </ul>



		<ul style="list-style-type: none"> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

				<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

Electrical energy management  
Battery management 3.0

- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current

		<ul style="list-style-type: none"> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> </ul> </li> </ul>

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3.2

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Central electronics  
Central electronics 3.0

- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply

		<ul style="list-style-type: none"> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
		<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> </ul>

				<p>Underbody/Steering Adaptive damping system 3.0</p> <ul style="list-style-type: none"> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b></li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**



Gear box control  
6-gears automatic transmission TF80SC

- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button

				<ul style="list-style-type: none"> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
2010/08 -	B6324S4	3.2	238	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights

		<ul style="list-style-type: none"> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> </ul> </li> </ul>

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				XC60 - XC60 3.2	
Year	Engine	Liters	HP	System	Functions
				<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> </ul> </li> </ul>

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Central electronics  
Central electronics 3.0

- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering



				<ul style="list-style-type: none"> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> </ul> </li> </ul>

				<p>Underbody/Steering Adaptive damping system 3.0</p> <ul style="list-style-type: none"> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**

Gear box control  
6-gears automatic transmission TF80SC

- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
<p>2010/08 -</p>	<p>B6324S4</p>	<p>3.2</p>	<p>238</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof

				<ul style="list-style-type: none"> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
			<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				XC60 - XC60 2.0T	
Year	Engine	Liters	HP	System	Functions
				<p>Anti-block system</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>



ESP Teves Mk25 E1

- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -

		<ul style="list-style-type: none"> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> </ul> </li> </ul>

2010/08  
-  
2011/07

B4204T6

2.0

203

Central electronics  
Central electronics 3.0

- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering

		<ul style="list-style-type: none"> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> </ul> </li> </ul>

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
				Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> </ul> </li> </ul>

2010/08 - 2011/07	D5204T2	2.0	163	Central electronics Central electronics 3.0	<ul style="list-style-type: none"> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> <li>- Time: Fourth last alarm triggering</li> <li>- Tank flap unlocking relay</li> <li>- Rear fog light relay</li> <li>- Windscreen washer system switch</li> <li>- Center stop lamp actuation</li> <li>- Fog light switch</li> <li>- Rain sensor</li> <li>- Wiper switch</li> <li>- Light sensor</li> <li>- Rear fog lights switch</li> <li>- Washer fluid level monitoring</li> <li>- Backup lights</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery voltage monitoring</li> <li>- Battery power consumption</li> <li>- Operating time in minutes</li> <li>- No-load current mean value</li> <li>- Age of the vehicle in days</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Clutch pedal position</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> </ul>
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		<ul style="list-style-type: none"> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**

Gear box control  
6-gears automatic transmission TF80SC

- Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>- Parking brake apply</li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
<p>2011/08 - 2012/07</p>	<p>D5204T3</p>	<p>2.0</p>	<p>163</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2

		<ul style="list-style-type: none"> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			Additional heater Auxiliary/supplementary heater 3.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			Parking assisting system Park Distance Control 3.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					XC60 - XC60 T5	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> </ul> </li> </ul>	



Anti-block system  
ESP Teves Mk25 E1

- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature

		<ul style="list-style-type: none"> <li>- Control unit temperature</li> <li>- El.hydraulic power steering status</li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> </ul> </li> </ul>

2010/08

B4204T7

2.0

240

Central electronics  
Central electronics 3.0

- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3

		<ul style="list-style-type: none"> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					XC60 - XC60 D4 AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position</li> </ul> </li> </ul>	

Anti-block system  
ESP Teves Mk25 E1

- adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration

Gear box control  
6-gears automatic transmission TF80SC

- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

- **Identification**

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
<p>2011/08 -</p>	<p>D5244T17</p>	<p>2.4</p>	<p>163</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> </ul> </li> </ul>



Central electronics  
Central electronics 3.0

- Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**

		<ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					XC60 - XC60 D3	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b></li> </ul>	

Anti-block system  
ESP Teves Mk25 E1

- Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode

Gear box control  
6-gears automatic transmission TF80SC

- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Vehicle driving speed
  - Battery voltage
  - Warning lights
  - Steering wheel rotational speed
  - Current consumption pump motor
  - Pump motor nominal speed
  - Actual speed, pump motor
  - Output stage temperature
  - Control unit temperature
  - El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake

2012/08 -	D5204T7	2.0	136	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>- Parking brake apply</li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2

		<ul style="list-style-type: none"> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supple./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				XC60 - XC60 D4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- Vehicle driving speed
- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position

Gear box control  
6-gears automatic transmission TF80SC

- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Underbody/Steering  
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Power supply
- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>- Brake pads replacement, step 2</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
2012/08	D5204T3	2.0	163		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right

		<ul style="list-style-type: none"> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					XC70 I - XC70 I 2.5T AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> </ul> </li> </ul>	

Instrument cluster  
Instrument cluster 1.0

- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**



Gear box control  
 5-gears automatic transmission 55-50/51SN1.0

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test

2002/08  
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B5254T2

2.5

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210

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received

Central electronics  
Front central electronics 9.12.2

- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper
  - Fog light
  - rear left el. window lifter open

- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights

Central electronics  
Central electronics 1.0

- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights

					<ul style="list-style-type: none"> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

VOLVO					XC70 I - XC70 I 2.4D AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> </ul>	

Instrument cluster  
Instrument cluster 1.0

- **Error memory**
- **Current values**
  - Failure lamp
  - Engine revolution
  - Warning lights
  - Kilometer reading
  - Fuel level in the tank
  - Rear fog light
  - Cooling agent temperature motor
  - Airbag signal lamp
  - Cruise control, control light
  - Oil pressure control lamp
  - Generator lamp
  - Brakes control light
  - ABS control light
  - Hi-beam lights, control light
  - Trailer turn sign. indicators, warning light
  - Fuel level warning lamp
  - Glow control light
  - Vehicle speed signal
  - TCS/ESP OFF warning light
  - Airbag warning light, status
  - Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left



- Exhaust valve: front right front right
- Inlet valve: rear right
- Inlet valve: rear left
- Exhaust valve: rear right
- Exhaust valve: rear left
- Pump motor

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value

- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal

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Front central electronics 9.12.2

- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay

- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing

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- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring

	<ul style="list-style-type: none"> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> </ul> </li> </ul>



				<ul style="list-style-type: none"> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
		<p>Anti-block system ABS Teves Mk25 VER2</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> </ul> </li> </ul>



2002/08	-	B5234T7	2.3	190	<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p> <ul style="list-style-type: none"> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul> <p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Functional tests</b></p> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> <p>• <b>Adjustments / settings</b></p> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> </ul>
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Central electronics  
Central electronics 1.0

- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply

	<ul style="list-style-type: none"> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul>
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO					XC70 I - XC70 I D5 AWD	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Driving speed</li> <li>- Gear lever AT position</li> <li>- kick-down switch</li> </ul> </li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**

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- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status

Central electronics  
Front central electronics 9.12.2

- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper
  - Fog light



					<ul style="list-style-type: none"> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>

VOLVO				XC70 I - XC70 I 2.4T AWD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> </ul> </li> </ul>

Instrument cluster  
Instrument cluster 1.0

- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic
  - Geartronic -
  - Winter mode
  - Gear ratio actual value
  - Gear ratio set value

				<ul style="list-style-type: none"> <li>- Start release by selector lever module</li> </ul>
<p>2004/08 - 2007/07</p>	<p>B5244T4</p>	<p>2.4</p>	<p>200 - 200</p>	<ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul> </li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> <li>- Rear left window</li> <li>- Rear right window</li> <li>- Childproof lock relay</li> <li>- Main beam relay</li> <li>- Low-beam relay</li> </ul> </li> </ul>

Central electronics  
Front central electronics 9.12.2

- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump

		<ul style="list-style-type: none"> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
	<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Pump, hot water</li> <li>- Actuators power supply</li> <li>- Operating hour meter</li> <li>- Flame sensor</li> <li>- Ignition status</li> <li>- Additional heater</li> <li>- Glow plug, PWM signal</li> <li>- Combustion air blower actual speed</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Combustion air blower PWM signal</li> <li>- Combustion air blower specified speed</li> <li>- Electric fuel pump frequency</li> <li>- Glow plug actuation</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Glow plug</li> <li>- Additional heater</li> <li>- Pump, hot water</li> <li>- Combustion air blower PWM signal</li> </ul> </li> </ul>
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VOLVO					XC70 II - XC70 II D5 AWD	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> </ul>	

Gear box control  
6-gears automatic transmission TF80SC

- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input



				<ul style="list-style-type: none"> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
2007/08 - 2009/07	D5244T4	2.4	185	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light

			<p>Immobilizer Access system/immobilizer 3.0</p>	<p>- Ignition key eject</p> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> </ul> </li> </ul>

			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b></li> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
		<p>Parking brake Electrical parking brake 3.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Release parking brake</li> <li>- Parking brake apply</li> <li>• <b>Adjustments / settings</b></li> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> <li>• <b>Adjustments / settings</b></li> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> </ul>

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Central electronics  
Central electronics 3.0

- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value

	<ul style="list-style-type: none"> <li>- Age of the vehicle in days</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Clutch pedal position</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> </ul> </li> </ul>



				<ul style="list-style-type: none"> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> </ul> </li> </ul>

			Park Distance Control 3.0	<ul style="list-style-type: none"> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
			Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> </ul> </li> </ul>

Electrical energy management  
Battery management 3.0

- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3

2011/08	D5244T11	2.4	215	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4

				<ul style="list-style-type: none"> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
		<p>Underbody/Steering Adaptive damping system 3.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					XC70 II - XC70 II 3.2 AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position</li> </ul> </li> </ul>	

Anti-block system  
ESP Teves Mk25 E1

- adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration



Gear box control  
6-gears automatic transmission TF80SC

- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left

				<ul style="list-style-type: none"> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
<p>2007/08 - 2010/07</p>	<p>B6324S</p>	<p>3.2</p>	<p>238</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

Immobilizer  
Access system/immobilizer 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Number of registered master keys
  - Number of registered slave keys
  - Front left door handle button
  - Front right door handle button
  - Rear right door handle button
  - Rear lid exterior antenna
  - Front interior antenna
  - Rear interior antenna
  - Rear left door handle button
  - Rear right antenna
  - Rear left antenna
  - Start/Stop button
  - Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontal) sensor output: rear left
  - Car level (horizontal) sensor output: rear right
  - Car level (horizontal) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act. current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage

			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b></li> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Release parking brake</li> <li>- Parking brake apply</li> <li>• <b>Adjustments / settings</b></li> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> <li>• <b>Adjustments / settings</b></li> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> </ul>

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Central electronics  
Central electronics 3.0

- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value



- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna

Immobilizer  
Access system/immobilizer 3.0

				<ul style="list-style-type: none"> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			<p>Parking assisting system</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> </ul> </li> </ul>

				Park Distance Control 3.0	<ul style="list-style-type: none"> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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<b>VOLVO</b>	<b>XC70 II - XC70 II 2.4D AWD</b>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> </ul> </li> </ul>

Gear box control  
6-gears automatic transmission TF80SC

- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input

				<ul style="list-style-type: none"> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
<p>2007/08 - 2009/07</p>	<p>D5244T5</p>	<p>2.4</p>	<p>163</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

Immobilizer  
Access system/immobilizer 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Number of registered master keys
  - Number of registered slave keys
  - Front left door handle button
  - Front right door handle button
  - Rear right door handle button
  - Rear lid exterior antenna
  - Front interior antenna
  - Rear interior antenna
  - Rear left door handle button
  - Rear right antenna
  - Rear left antenna
  - Start/Stop button
  - Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontality) sensor output: rear left
  - Car level (horizontality) sensor output: rear right
  - Car level (horizontality) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act. current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature

			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> </ul> </li> </ul>



		<ul style="list-style-type: none"> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b></li> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Release parking brake</li> <li>- Parking brake apply</li> <li>• <b>Adjustments / settings</b></li> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> <li>• <b>Adjustments / settings</b></li> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after</li> </ul>

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Central electronics  
Central electronics 3.0

battery change

- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes

	<ul style="list-style-type: none"> <li>- No-load current mean value</li> <li>- Age of the vehicle in days</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Clutch pedal position</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
			Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
			Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> </ul> </li> </ul>

				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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<b>VOLVO</b>	<b>XC70 II - XC70 II T6 AWD</b>
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> </ul>

Electrical energy management  
Battery management 3.0

• **Current values**

- Battery voltage
- Battery charging status
- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control  
6-gears automatic transmission TF80SC

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current

• **Actuators**

- Gear shift solenoid valve 1

		<ul style="list-style-type: none"> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> </ul> </li> </ul>



2008/08 - 2010/07	B6304T2	3.0	286	Central electronics Central electronics 3.0	<ul style="list-style-type: none"> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> <li>- Time: Fourth last alarm triggering</li> <li>- Tank flap unlocking relay</li> <li>- Rear fog light relay</li> <li>- Windscreen washer system switch</li> <li>- Center stop lamp actuation</li> <li>- Fog light switch</li> <li>- Rain sensor</li> <li>- Wiper switch</li> <li>- Light sensor</li> <li>- Rear fog lights switch</li> <li>- Washer fluid level monitoring</li> <li>- Backup lights</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery voltage monitoring</li> <li>- Battery power consumption</li> <li>- Operating time in minutes</li> <li>- No-load current mean value</li> <li>- Age of the vehicle in days</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Clutch pedal position</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> </ul>
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		<ul style="list-style-type: none"> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul> </li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> </ul> </li> </ul>

			Adaptive damping system 3.0	<ul style="list-style-type: none"> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
			Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration

Gear box control  
6-gears automatic transmission TF80SC

- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left

				<ul style="list-style-type: none"> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
2010/08	B6304T4	3.0	304	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
  - Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

Immobilizer  
Access system/immobilizer 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - stop lights switch
  - Clutch pedal switch
  - Rear left door exterior handle contact
  - Rear right door exterior handle contact
  - Front driver side door lock switch
  - Front passen. side door lock switch
  - Rear left door lock switch
  - Rear right door lock switch
  - Ext. door handle electronics contact, front left
  - Ext. door handle electronics contact, front right
  - Number of registered master keys
  - Number of registered slave keys
  - Front left door handle button
  - Front right door handle button
  - Rear right door handle button
  - Rear lid exterior antenna
  - Front interior antenna
  - Rear interior antenna
  - Rear left door handle button
  - Rear right antenna
  - Rear left antenna
  - Start/Stop button
  - Center interior antenna

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontal) sensor output: rear left
  - Car level (horizontal) sensor output: rear right
  - Car level (horizontal) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act. current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage



				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					XC70 II - XC70 II 2.4D DRIVE	
Year	Engine	Liters	HP	System	Functions	
				<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> </ul> </li> </ul>	

		<ul style="list-style-type: none"> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
<p>Electrical energy management Battery management 3.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> </ul> </li> </ul>

Gear box control  
6-gears automatic transmission TF80SC

- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor
  - Parking brake, control light
  - Actuation counter
  - Left parking brake request
  - Right parking brake request
  - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
  - Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear

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Central electronics  
Central electronics 3.0

- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
  - Tire monitoring system
- **Error memory**
- **Current values**
  - Power supply
  - Accelerator pedal position
  - electric fuel pump
  - brake fluid level
  - Top contact switch
  - Rear top contact switch
  - Brake pedal switch
  - Light switch
  - High beam light
  - Short lights, left
  - Short lights, right
  - Side marker light front left
  - Side-marker lamp, right front
  - Kilometer reading
  - Intensity of instrument illumination
  - Fuel fill level signal
  - Clutch pedal switch
  - Changeover switch Full-/Low beam
  - Signal horn
  - Fog light control lamp
  - Rear fog lights control lamp
  - Main beam relay
  - Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA

- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna

Immobilizer  
Access system/immobilizer 3.0

		<ul style="list-style-type: none"> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supple./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>

				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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VOLVO				XC70 II - XC70 II D3 DRIVe	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor
  - Parking brake, control light
  - Actuation counter
  - Left parking brake request
  - Right parking brake request
  - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
  - Brake light/brake pedal position switch
- **Adjustments / settings**
  - Start mode
  - Program sensor code (activator)
  - Sun roof initialization
  - Reset crash detection signal
  - Rear wiper with reverse gear
  - Reset CE power supply adaptation after battery change
  - Reset BMS power supply adaptation after battery change
  - Read out alarm sources
  - Instrument cluster illumination day/night mode adaptation
- **Special functions**



<p>2010/08 - 2011/12</p>	<p>D5204T2</p>	<p>2.0</p>	<p>163</p>	<p>Central electronics Central electronics 3.0</p>	<ul style="list-style-type: none"> <li>- Tire monitoring system</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> <li>- Time: Fourth last alarm triggering</li> <li>- Tank flap unlocking relay</li> <li>- Rear fog light relay</li> <li>- Windscreen washer system switch</li> <li>- Center stop lamp actuation</li> <li>- Fog light switch</li> <li>- Rain sensor</li> <li>- Wiper switch</li> <li>- Light sensor</li> <li>- Rear fog lights switch</li> <li>- Washer fluid level monitoring</li> <li>- Backup lights</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery voltage monitoring</li> <li>- Battery power consumption</li> <li>- Operating time in minutes</li> <li>- No-load current mean value</li> <li>- Age of the vehicle in days</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Clutch pedal position</li> </ul>
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- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

**• Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

**• Identification**

**• Clear errors**

**• Error memory**

**• Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Immobilizer  
Access system/immobilizer 3.0

Underbody/Steering  
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Car level (horizontal) sensor output: rear left
  - Car level (horizontal) sensor output: rear right
  - Car level (horizontal) sensor output: front left
  - Electronic control unit supply voltage
  - Control unit, Voltage sensor 1
  - Control unit, Voltage sensor 2
  - Front left damper valve resistance
  - Front right damper valve resistance
  - Rear left damper valve resistance
  - Rear right damper valve resistance
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve act. current
  - Vehicle level sensor, front right
  - Front left damper valve actuation
  - Front right damper valve actuation
  - Rear left damper valve actuation
  - Rear right damper valve actuation
  - Damper mode
  - Front right acceleration sensor power supply
  - Front left acceleration sensor power supply
  - Rear left acceleration sensor power supply
  - Front left damper status
  - Front right damper status
  - Rear left damper status
  - Rear right damper status

Additional heater  
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Fuel warming up
  - Total run
  - Coolant temperature
  - Battery voltage
  - Passenger compartment temperature
  - Starter
  - Operating status
  - Additional cooling fluid pump
  - Glow plugs control
  - Ambient temperature
  - Auxiliary/supplementary heater operating time
  - Auxiliary/supplementary heater heating time
  - Electronic control unit power supply
  - Glow plug
  - Combustion air blower actuation
  - Combustion air blower
  - Supplem./auxiliary heater fuel pump
  - Central electronics power supply

Parking assisting system  
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Power supply
  - Reverse gear
  - Trailer detection
  - Distance, left front, outside
  - Distance, left front, inside
  - Distance, right front, inside
  - Distance, right front, outside
  - Vehicle drive status
  - Rear left outer distance
  - Rear left inner distance

				<ul style="list-style-type: none"> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
			<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul>
<p style="text-align: center;">Gear box control 6-gears automatic transmission TF80SC</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Release parking brake</li> <li>- Parking brake apply</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul> </li> </ul>
<p>2011/08 -</p>	<p>D5204T3</p>	<p>2.0</p>	<p>163</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Windscreen wiper relay
  - Stop light
  - Cruise control CRUISE switch
  - Tempomat CANCEL switch
  - Tempomat ACCEL/RESUME switch
  - Indicators switch
  - Reg. number illumination
  - Emergency lights switch
  - Front fog lights relay
  - Working mode
  - Right turn light
  - Left turn light
  - ACC button for distance reducing
  - ACC button for distance increasing
  - Time: Last alarm triggering
  - Time: Last but 1 alarm triggering
  - Time: Third last alarm triggering
  - Time: Fourth last alarm triggering
  - Tank flap unlocking relay
  - Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay

		<ul style="list-style-type: none"> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul> </li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontal) sensor output: rear left</li> <li>- Car level (horizontal) sensor output: rear right</li> <li>- Car level (horizontal) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul>
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO				XC70 II - XC70 II 3.2 2WD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Electrical energy management  
Battery management 3.0

- **Identification**
- **Adjustments / settings**
  - Battery replacement
  - Battery sensor adaptation reset
- **Current values**
  - Battery voltage
  - Battery charging status
  - Battery sensor
  - Alternator, charging voltage
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 40-79mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery monitoring sensor status
  - Battery operating time since monitoring reset
  - Battery temperature
  - Total no-load current mean value
  - Battery status detection
  - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**

Gear box control  
6-gears automatic transmission TF80SC

- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

Parking brake  
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
  - Release parking brake
  - Parking brake apply
- **Adjustments / settings**
  - Brake pads replacement, step 1
  - Brake pads replacement, step 2
- **Error memory**
- **Current values**
  - Power supply
  - Actuators during vehicle operation
  - Inclination sensor
  - Parking brake button
  - Left control motor, current input
  - Right control motor, current input
  - Parking brake status, left
  - Parking brake status, right
  - Clutch pedal position
  - Rear outer friction pad wearout sensor
  - Parking brake, control light

				<ul style="list-style-type: none"> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
2010/08	B6324S5	3.2	243	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after battery change</li> <li>- Read out alarm sources</li> <li>- Instrument cluster illumination day/night mode adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Tire monitoring system</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Accelerator pedal position</li> <li>- electric fuel pump</li> <li>- brake fluid level</li> <li>- Top contact switch</li> <li>- Rear top contact switch</li> <li>- Brake pedal switch</li> <li>- Light switch</li> <li>- High beam light</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Side marker light front left</li> <li>- Side-marker lamp, right front</li> <li>- Kilometer reading</li> <li>- Intensity of instrument illumination</li> <li>- Fuel fill level signal</li> <li>- Clutch pedal switch</li> <li>- Changeover switch Full-/Low beam</li> <li>- Signal horn</li> <li>- Fog light control lamp</li> <li>- Rear fog lights control lamp</li> <li>- Main beam relay</li> <li>- Windscreen wiper relay</li> <li>- Stop light</li> <li>- Cruise control CRUISE switch</li> <li>- Tempomat CANCEL switch</li> <li>- Tempomat ACCEL/RESUME switch</li> <li>- Indicators switch</li> <li>- Reg. number illumination</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Working mode</li> <li>- Right turn light</li> <li>- Left turn light</li> <li>- ACC button for distance reducing</li> <li>- ACC button for distance increasing</li> <li>- Time: Last alarm triggering</li> <li>- Time: Last but 1 alarm triggering</li> <li>- Time: Third last alarm triggering</li> <li>- Time: Fourth last alarm triggering</li> <li>- Tank flap unlocking relay</li> </ul> </li> </ul>

Central electronics  
Central electronics 3.0

- Rear fog light relay
  - Windscreen washer system switch
  - Center stop lamp actuation
  - Fog light switch
  - Rain sensor
  - Wiper switch
  - Light sensor
  - Rear fog lights switch
  - Washer fluid level monitoring
  - Backup lights
  - Number of no-load current events 0-9 mA
  - Number of no-load current events 10-19mA
  - Number of no-load current events 20-29mA
  - Number of no-load current events 30-39mA
  - Number of no-load current events 80-119 mA
  - Number of no-load current events >120 mA
  - Battery voltage monitoring
  - Battery power consumption
  - Operating time in minutes
  - No-load current mean value
  - Age of the vehicle in days
  - Sun sensor left
  - Sun sensor right
  - Clutch pedal position
  - Windshield washer relay
  - Driver's door contact switch
  - Front passenger door contact switch
  - Driver side rear door contact switch
  - Pass.side rear door contact switch
  - 1st alarm triggering
  - 2nd alarm triggering
  - 3rd alarm triggering
  - 4th alarm triggering
  - 5th alarm triggering
  - Indicator/hazard warning lights relay
  - Steering column, power supply
  - Cruise control/ACC button +
  - Cruise control/ACC button -
  - System power mode status
  - Rear left side marker light
  - Rear right side marker light
  - Operating time in days with alarm 1
  - Operating time in days with alarm 2
  - Operating time in days with alarm 3
  - Operating time in days with alarm 4
  - Operating time in days with alarm 5
  - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
  - Wiper Level 1
  - Wiper Level 2
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - Rear screen wiper
  - rear left indicator
  - rear right indicator
  - Open the sunroof
  - Close the sunroof
  - Brake lights
  - Side light/dipped beam/brake light
  - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**

			<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
			<p>Additional heater</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> </ul> </li> </ul>

				Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul>
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul> </li> </ul>

VOLVO					XC70 II - XC70 II D3 AWD	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> </ul> </li> </ul>	

		<ul style="list-style-type: none"> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Battery replacement</li> <li>- Battery sensor adaptation reset</li> </ul> </li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Battery voltage</li> <li>- Battery charging status</li> <li>- Battery sensor</li> <li>- Alternator, charging voltage</li> <li>- Number of no-load current events 0-9 mA</li> <li>- Number of no-load current events 10-19mA</li> <li>- Number of no-load current events 20-29mA</li> <li>- Number of no-load current events 30-39mA</li> <li>- Number of no-load current events 40-79mA</li> <li>- Number of no-load current events 80-119 mA</li> <li>- Number of no-load current events &gt;120 mA</li> <li>- Battery monitoring sensor status</li> <li>- Battery operating time since monitoring reset</li> <li>- Battery temperature</li> <li>- Total no-load current mean value</li> <li>- Battery status detection</li> <li>- Battery charge/discharge current</li> </ul> </li> </ul>
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Passenger compartment temperature</li> <li>- The ambient temperature</li> <li>- gear box oil temperature</li> <li>- transmission ratio</li> <li>- battery voltage, terminal 30</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Start permission</li> <li>- Brake pedal switch</li> <li>- Distance</li> <li>- Gear lever position</li> <li>- Needed gear</li> <li>- Gearbox input speed</li> </ul> </li> </ul>



		<ul style="list-style-type: none"> <li>- MIL-Status</li> <li>- Engine actual moment</li> <li>- Transmission output speed</li> <li>- Gear box transmission identification</li> <li>- Driving speed sensor signal</li> <li>- Gearshift solenoid 1</li> <li>- Gearshift solenoid 2</li> <li>- Transmission selector lever position P</li> <li>- Gear position in manual program</li> <li>- Fault message</li> <li>- Solenoid valve 4 actuation current</li> <li>- Solenoid valve 5 actuation current</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Geartronic</li> <li>- Geartronic -</li> <li>- Solenoid valve 1, actual current</li> <li>- Solenoid valve 2, actual current</li> <li>- Solenoid valve 3, actual current</li> <li>• <b>Actuators</b></li> <li>- Gear shift solenoid valve 1</li> <li>- Gear shift solenoid valve 2</li> <li>- Torque converter lock-up clutch solenoid valve</li> <li>- Pressure-regulation magnetic valve 1</li> <li>- Pressure-regulation magnetic valve 2</li> <li>- Pressure-regulation magnetic valve 3</li> <li>- Pressure control solenoid valve 4</li> <li>- Pressure control magnetic valve 5</li> </ul>
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Release parking brake</li> <li>- Parking brake apply</li> <li>• <b>Adjustments / settings</b></li> <li>- Brake pads replacement, step 1</li> <li>- Brake pads replacement, step 2</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- Actuators during vehicle operation</li> <li>- Inclination sensor</li> <li>- Parking brake button</li> <li>- Left control motor, current input</li> <li>- Right control motor, current input</li> <li>- Parking brake status, left</li> <li>- Parking brake status, right</li> <li>- Clutch pedal position</li> <li>- Rear outer friction pad wearout sensor</li> <li>- Parking brake, control light</li> <li>- Actuation counter</li> <li>- Left parking brake request</li> <li>- Right parking brake request</li> <li>- Status Handbrake</li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b></li> <li>- Alternator voltage functional test</li> <li>- Brake light/brake pedal position switch</li> <li>• <b>Adjustments / settings</b></li> <li>- Start mode</li> <li>- Program sensor code (activator)</li> <li>- Sun roof initialization</li> <li>- Reset crash detection signal</li> <li>- Rear wiper with reverse gear</li> <li>- Reset CE power supply adaptation after battery change</li> <li>- Reset BMS power supply adaptation after</li> </ul>

2011/08

D5244T17

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Central electronics  
Central electronics 3.0

battery change

- Read out alarm sources
- Instrument cluster illumination day/night mode

adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes

	<ul style="list-style-type: none"> <li>- No-load current mean value</li> <li>- Age of the vehicle in days</li> <li>- Sun sensor left</li> <li>- Sun sensor right</li> <li>- Clutch pedal position</li> <li>- Windshield washer relay</li> <li>- Driver's door contact switch</li> <li>- Front passenger door contact switch</li> <li>- Driver side rear door contact switch</li> <li>- Pass.side rear door contact switch</li> <li>- 1st alarm triggering</li> <li>- 2nd alarm triggering</li> <li>- 3rd alarm triggering</li> <li>- 4th alarm triggering</li> <li>- 5th alarm triggering</li> <li>- Indicator/hazard warning lights relay</li> <li>- Steering column, power supply</li> <li>- Cruise control/ACC button +</li> <li>- Cruise control/ACC button -</li> <li>- System power mode status</li> <li>- Rear left side marker light</li> <li>- Rear right side marker light</li> <li>- Operating time in days with alarm 1</li> <li>- Operating time in days with alarm 2</li> <li>- Operating time in days with alarm 3</li> <li>- Operating time in days with alarm 4</li> <li>- Operating time in days with alarm 5</li> <li>- Time: Fifth last alarm triggering</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- Wiper Level 1</li> <li>- Wiper Level 2</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- Rear screen wiper</li> <li>- rear left indicator</li> <li>- rear right indicator</li> <li>- Open the sunroof</li> <li>- Close the sunroof</li> <li>- Brake lights</li> <li>- Side light/dipped beam/brake light</li> <li>- Ignition key eject</li> </ul>
<p>Immobilizer Access system/immobilizer 3.0</p>	<p><b>• Identification</b></p> <p><b>• Clear errors</b></p> <p><b>• Error memory</b></p> <p><b>• Current values</b></p> <ul style="list-style-type: none"> <li>- stop lights switch</li> <li>- Clutch pedal switch</li> <li>- Rear left door exterior handle contact</li> <li>- Rear right door exterior handle contact</li> <li>- Front driver side door lock switch</li> <li>- Front passen. side door lock switch</li> <li>- Rear left door lock switch</li> <li>- Rear right door lock switch</li> <li>- Ext. door handle electronics contact, front left</li> <li>- Ext. door handle electronics contact, front right</li> <li>- Number of registered master keys</li> <li>- Number of registered slave keys</li> <li>- Front left door handle button</li> <li>- Front right door handle button</li> <li>- Rear right door handle button</li> <li>- Rear lid exterior antenna</li> <li>- Front interior antenna</li> <li>- Rear interior antenna</li> <li>- Rear left door handle button</li> </ul>

		<ul style="list-style-type: none"> <li>- Rear right antenna</li> <li>- Rear left antenna</li> <li>- Start/Stop button</li> <li>- Center interior antenna</li> </ul>
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Car level (horizontality) sensor output: rear left</li> <li>- Car level (horizontality) sensor output: rear right</li> <li>- Car level (horizontality) sensor output: front left</li> <li>- Electronic control unit supply voltage</li> <li>- Control unit, Voltage sensor 1</li> <li>- Control unit, Voltage sensor 2</li> <li>- Front left damper valve resistance</li> <li>- Front right damper valve resistance</li> <li>- Rear left damper valve resistance</li> <li>- Rear right damper valve resistance</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act. current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve act. current</li> <li>- Vehicle level sensor, front right</li> <li>- Front left damper valve actuation</li> <li>- Front right damper valve actuation</li> <li>- Rear left damper valve actuation</li> <li>- Rear right damper valve actuation</li> <li>- Damper mode</li> <li>- Front right acceleration sensor power supply</li> <li>- Front left acceleration sensor power supply</li> <li>- Rear left acceleration sensor power supply</li> <li>- Front left damper status</li> <li>- Front right damper status</li> <li>- Rear left damper status</li> <li>- Rear right damper status</li> </ul> </li> </ul>
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Fuel warming up</li> <li>- Total run</li> <li>- Coolant temperature</li> <li>- Battery voltage</li> <li>- Passenger compartment temperature</li> <li>- Starter</li> <li>- Operating status</li> <li>- Additional cooling fluid pump</li> <li>- Glow plugs control</li> <li>- Ambient temperature</li> <li>- Auxiliary/supplementary heater operating time</li> <li>- Auxiliary/supplementary heater heating time</li> <li>- Electronic control unit power supply</li> <li>- Glow plug</li> <li>- Combustion air blower actuation</li> <li>- Combustion air blower</li> <li>- Supplem./auxiliary heater fuel pump</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Reverse gear</li> <li>- Trailer detection</li> <li>- Distance, left front, outside</li> </ul> </li> </ul>

				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> <li>- Distance, left front, inside</li> <li>- Distance, right front, inside</li> <li>- Distance, right front, outside</li> <li>- Vehicle drive status</li> <li>- Rear left outer distance</li> <li>- Rear left inner distance</li> <li>- Rear right outer distance</li> <li>- Rear right inner distance</li> <li>- Distance sensors</li> <li>- Front Park Distance Control</li> <li>- Rear Park Distance Control</li> </ul>
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VOLVO				XC90 - XC90 2.5T AWD	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature

		<ul style="list-style-type: none"> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> <li>- Start test mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> <li>- Transmission control, torque reduction</li> <li>- kick-down switch</li> <li>- Solenoid valve 1/2</li> <li>- Power supply</li> <li>- Engine revolution</li> <li>- Solenoid valve 3</li> <li>- Winter switch</li> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- system power supply</li> <li>- gear box oil temperature</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Ignition</li> <li>- Torque limitation</li> <li>- Gear lever position</li> <li>- Gearbox input speed</li> <li>- Solenoid valve 4/5</li> <li>- Solenoid switch valve 5</li> <li>- Ignition key position</li> <li>- Engine torque</li> <li>- Torque reduction on changing gear</li> <li>- Gear ratio actual value</li> <li>- Gear ratio set value</li> <li>- Brake CU signal, vehicle speed</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- regul. Pressure solenoid valve 2</li> <li>- regul. pressure solenoid valve 2</li> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> </ul>

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic
  - Geartronic -
  - Winter mode
  - Gear ratio actual value



				<ul style="list-style-type: none"> <li>- Gear ratio set value</li> <li>- Start release by selector lever module</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul>
<p>2002/10 - 2012/10</p>	<p>B5254T2</p>	<p>2.5</p>	<p>210</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> <li>- Rear left window</li> <li>- Rear right window</li> <li>- Childproof lock relay</li> <li>- Main beam relay</li> </ul> </li> </ul>

Central electronics  
Front central electronics 9.12.2

- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump

- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)

Central electronics  
Central electronics 1.0

- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code

			<ul style="list-style-type: none"> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>	
		<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>	
		<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> </ul> </li> </ul>	

VOLVO				XC90 - XC90 T6 AWD	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left

- Pump motor

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode

- Seat heating adjustment

- Blower motor, run-on

- Reset undervoltage counter

- Reset crash detection signal

- Adjustment: Lighting on leaving vehicle

- Adjustment: One-touch turn signal indication

- Fuel tank cap locking

- Illumination system

- Daytime driving light adjustment

- Rear wiper with reverse gear

- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed

- Total run

- Contact switch

- Fuel pump relay

- start signal, terminal 50

- Cruise control

- Terminal 30

- Immobilizer

- engine control unit ignition blocking

- Terminal 15

- Start permission

- Output stage group A

- Output stage group B

- Function windscreen washing

- Function washing rear window washing

- End position windshield wiper

- Tank filling door

- Stationary heater/ventilation activation

- Supply voltage term.30

- Switch identification

- Vehicle model

- Transponder

- Signal horn

- Vehicle information (VIN)

- Transponder communication

- Generator, L-Signal

- Headlight level control signal

- Left xenon lamp signal

- Right xenon lamp signal

- Power supply relay

- Automatic transmission power supply

- Selector lever lock relay

- Relay starter

- Rear left window

- Rear right window

- Childproof lock relay

- Main beam relay

- Low-beam relay

- Stand light relay

- Relay, daytime running lights

- Front left door status

- Front right door status

- Rear left door status

- Rear right door status

- Hatchback status

- Front left door locking

- Front right door locking



2003/01  
-  
2006/07

B6294T

2.9

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Central electronics  
Front central electronics 9.12.2

- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn

- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter

Central electronics  
Central electronics 1.0

- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left

					<ul style="list-style-type: none"> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

VOLVO					XC90 - XC90 D5 AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>	

Instrument cluster  
Instrument cluster 1.0

- **Adjustments / settings**

- Read configuration
- Option display configuration
- Service interval adaptation
- Service interval display reset
- Activate/deactivate belt warning
- Parking brake warning tone

- **Error memory**

- **Current values**

- Failure lamp
- Engine revolution
- Warning lights
- Kilometer reading
- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light

- **Actuators**

- Warning lights
- Failure lamp
- Tank reserve lamp triggering
- Gong
- Preheat control light
- Generator lamp
- Hi-beam lights, control light
- Rear fog lights control light
- Trailer turn signal, control light
- Airbag control light
- All displays and control lights
- ABS control light
- Brakes control light
- Parking brake, control light
- ASR/ESP control light

- **Identification**

- **Clear errors**

- **Functional tests**

- ESP test

- **Adjustments / settings**

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor

- **Special functions**

- Bleed

- **Error memory**

- **Current values**

- Vehicle driving speed
- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed

Anti-block system  
ESP Teves Mk25 E1

- front right tire speed
- rare right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic
  - Geartronic -
  - Winter mode
  - Gear ratio actual value
  - Gear ratio set value
  - Start release by selector lever module
- **Actuators**

2003/01 - 2006/07	D5244T	2.4	163	<ul style="list-style-type: none"> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> <li>- Rear left window</li> <li>- Rear right window</li> <li>- Childproof lock relay</li> <li>- Main beam relay</li> <li>- Low-beam relay</li> <li>- Stand light relay</li> <li>- Relay, daytime running lights</li> <li>- Front left door status</li> </ul> </li> </ul>
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Central electronics  
Front central electronics 9.12.2

- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay

- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal

Central electronics  
Central electronics 1.0

- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay

				<ul style="list-style-type: none"> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- Battery voltage</li> <li>- Driving wheels angle</li> <li>- Steering angle sensor signal voltage A1</li> <li>- Steering angle sensor signal voltage A2</li> <li>- Status of LED circuit A</li> <li>- Status of LED circuit B</li> <li>- Status, steering angle sensor signal A1</li> <li>- Status, steering angle sensor signal A2</li> <li>- Status, steering angle sensor signal A3</li> <li>- Status, steering angle sensor signal A4</li> <li>- Status, steering angle sensor signal B1</li> <li>- Status, steering angle sensor signal B2</li> <li>- Status, steering angle sensor signal B3</li> <li>- Status, steering angle sensor signal B4</li> <li>- Current level LED circuit A</li> <li>- Current level LED circuit B</li> </ul> </li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

Instrument cluster  
Instrument cluster 1.0

- **Adjustments / settings**

- Read configuration
- Option display configuration
- Service interval adaptation
- Service interval display reset
- Activate/deactivate belt warning
- Parking brake warning tone

- **Error memory**

- **Current values**

- Failure lamp
- Engine revolution
- Warning lights
- Kilometer reading
- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light

- **Actuators**

- Warning lights
- Failure lamp
- Tank reserve lamp triggering
- Gong
- Preheat control light
- Generator lamp
- Hi-beam lights, control light
- Rear fog lights control light
- Trailer turn signal, control light
- Airbag control light
- All displays and control lights
- ABS control light
- Brakes control light
- Parking brake, control light
- ASR/ESP control light

- **Identification**

- **Clear errors**

- **Functional tests**

- ABS test

- **Error memory**

- **Current values**

- Vehicle driving speed
- Battery voltage
- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- Brake pedal position sensor
- Voltage at CEM
- Vehicle acceleration
- Front left wheel, speed signal
- Front right wheel, speed signal
- Rear right wheel, speed signal
- Rear left wheel, speed signal
- Front left brake disc temperature
- Front right brake disc temperature

Anti-block system  
ABS Teves Mk25 VER2

- Rear left brake disc temperature
- Rear right brake disc temperature

• **Actuators**

- Inlet valve: front right front right
- Inlet valve: front left front left
- Exhaust valve: front left front left
- Exhaust valve: front right front right
- Inlet valve: rear right
- Inlet valve: rear left
- Exhaust valve: rear right
- Exhaust valve: rear left
- Pump motor

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay

2005/05 -	D5244T4	2.4	185	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> <li>- Main beam relay</li> <li>- Low-beam relay</li> <li>- Stand light relay</li> <li>- Relay, daytime running lights</li> <li>- Front left door status</li> <li>- Front right door status</li> <li>- Rear left door status</li> <li>- Rear right door status</li> <li>- Hatchback status</li> <li>- Front left door locking</li> <li>- Front right door locking</li> <li>- Rear left door locking</li> <li>- Rear right door locking</li> <li>- Airbag triggering signal</li> <li>- Alarm LED</li> <li>- Xenon lamp status</li> <li>- Transponder ID received</li> <li>- Immobilizer relay status</li> <li>- Key number</li> <li>- Number of authorized keys</li> <li>- Ignition switch illuminated ring</li> <li>- Light sensor</li> <li>- Ignition key</li> <li>- Windscreen washing water level</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Lights cleaning</li> <li>- Fog light switch</li> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> <li>- Front windscreen wiper</li> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Relay terminal 15</li> <li>- Windscreen wiper switch</li> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> </ul> </li> </ul>
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- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder



Central electronics  
Central electronics 1.0

- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status

				<ul style="list-style-type: none"> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> </ul> </li> </ul>

Instrument cluster  
Instrument cluster 1.0

- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
  - ESP test
- **Adjustments / settings**
  - Brake pressure sensor zero pos. calibration
  - Lateral acceleration sensor zero position adjustment
  - Longitudinal acceleration sensor zero position adaptation
  - Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset

		<ul style="list-style-type: none"> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul>
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> </ul> </li> </ul>

<p>2007/10 - 2011/07</p>	<p>D5244T5</p>	<p>2.4</p>	<p>163</p>	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> <li>- Rear left window</li> <li>- Rear right window</li> <li>- Childproof lock relay</li> <li>- Main beam relay</li> <li>- Low-beam relay</li> <li>- Stand light relay</li> <li>- Relay, daytime running lights</li> <li>- Front left door status</li> <li>- Front right door status</li> <li>- Rear left door status</li> <li>- Rear right door status</li> <li>- Hatchback status</li> <li>- Front left door locking</li> <li>- Front right door locking</li> <li>- Rear left door locking</li> <li>- Rear right door locking</li> <li>- Airbag triggering signal</li> <li>- Alarm LED</li> <li>- Xenon lamp status</li> <li>- Transponder ID received</li> <li>- Immobilizer relay status</li> <li>- Key number</li> <li>- Number of authorized keys</li> <li>- Ignition switch illuminated ring</li> <li>- Light sensor</li> <li>- Ignition key</li> <li>- Windscreen washing water level</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Lights cleaning</li> <li>- Fog light switch</li> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> <li>- Front windscreen wiper</li> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> </ul>
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- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter

Central electronics  
Central electronics 1.0

- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status
  - Key number
  - Number of authorized keys
  - Ignition switch illuminated ring
  - Light sensor

- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

- **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights



				<ul style="list-style-type: none"> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
			Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b></li> </ul>

Anti-block system  
ESP Teves Mk25 E1

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
  - Bleed
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Battery voltage
  - Power supply
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - The ambient temperature
  - pressure sensor
  - Lateral acceleration sensor
  - Driving wheels angle
  - reflexive angle
  - Steering wheel angle offset
  - Longitudinal acceleration
  - Yaw rate sensor offset
  - Brake pressure sensor offset
  - Longitudinal acceleration sensor offset
  - Lateral acceleration sensor offset
  - Stored longitudinal acceleration sensor offset
  - Stored lateral acceleration sensor offset
  - Stored yaw rate sensor offset
  - Stored steering angle sensor offset
  - Stored brake pressure sensor offset
  - Brake booster vacuum chamber
  - Brake booster working chamber
  - LED STC/DSTC button
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right

- Inlet valve: front left front left
- Exhaust valve: front left front left
- Exhaust valve: front right front right
- Inlet valve: rear right
- Inlet valve: rear left
- Exhaust valve: rear right
- Exhaust valve: rear left
- Pump motor

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay

2010/08  
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D5244T18

2.4

200

Central electronics  
Front central electronics 9.12.2

- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump

- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal

Central electronics  
Central electronics 1.0

- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2

					<ul style="list-style-type: none"> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

VOLVO				XC90 - XC90 2.5T FWD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> </ul> </li> </ul>

Instrument cluster  
Instrument cluster 1.0

- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**



Gear box control  
5-gears automatic transmission 55-50/51SN1.0

- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Solenoid valve 1/2
  - Power supply
  - Engine revolution
  - Solenoid valve 3
  - Winter switch
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - system power supply
  - gear box oil temperature
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Ignition
  - Torque limitation
  - Gear lever position
  - Gearbox input speed
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Ignition key position
  - Engine torque
  - Torque reduction on changing gear
  - Gear ratio actual value
  - Gear ratio set value
  - Brake CU signal, vehicle speed
- **Actuators**
  - regul. Pressure solenoid valve 2
  - regul. pressure solenoid valve 2
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Solenoid valve: direct gear direct gear
  - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset
  - Transmission position sensor calibration
  - Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**

2003/01  
-  
2006/07

B5254T2

2.5

210

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED

Central electronics  
Front central electronics 9.12.2

- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper

- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay

Central electronics  
Central electronics 1.0

- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump

					<ul style="list-style-type: none"> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

VOLVO				XC90 - XC90 V8 AWD	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> </ul> </li> </ul>

			<ul style="list-style-type: none"> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
		<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Brake pedal position sensor</li> <li>- Voltage at CEM</li> <li>- Vehicle acceleration</li> <li>- Front left wheel, speed signal</li> <li>- Front right wheel, speed signal</li> <li>- Rear right wheel, speed signal</li> <li>- Rear left wheel, speed signal</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Inlet valve: front right front right</li> <li>- Inlet valve: front left front left</li> <li>- Exhaust valve: front left front left</li> <li>- Exhaust valve: front right front right</li> <li>- Inlet valve: rear right</li> <li>- Inlet valve: rear left</li> <li>- Exhaust valve: rear right</li> <li>- Exhaust valve: rear left</li> <li>- Pump motor</li> </ul> </li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Adaptive parameters reset</li> <li>- Transm. oil change interval reset</li> <li>- Transmission position sensor calibration</li> <li>- Transmission adaptation</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Start gear indicator mode</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Accelerator pedal position</li> <li>- Coolant temperature</li> </ul> </li> </ul>



Gear box control  
6-gears automatic transmission TF80SC

- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50

<p>2005/03 - 2010/12</p>	<p>B8444S</p>	<p>4.4</p>	<p>315</p>	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> <li>- Rear left window</li> <li>- Rear right window</li> <li>- Childproof lock relay</li> <li>- Main beam relay</li> <li>- Low-beam relay</li> <li>- Stand light relay</li> <li>- Relay, daytime running lights</li> <li>- Front left door status</li> <li>- Front right door status</li> <li>- Rear left door status</li> <li>- Rear right door status</li> <li>- Hatchback status</li> <li>- Front left door locking</li> <li>- Front right door locking</li> <li>- Rear left door locking</li> <li>- Rear right door locking</li> <li>- Airbag triggering signal</li> <li>- Alarm LED</li> <li>- Xenon lamp status</li> <li>- Transponder ID received</li> <li>- Immobilizer relay status</li> <li>- Key number</li> <li>- Number of authorized keys</li> <li>- Ignition switch illuminated ring</li> <li>- Light sensor</li> <li>- Ignition key</li> <li>- Windscreen washing water level</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Lights cleaning</li> <li>- Fog light switch</li> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> <li>- Front windscreen wiper</li> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> </ul>
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- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle

Central electronics  
Central electronics 1.0

- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status
  - Key number
  - Number of authorized keys
  - Ignition switch illuminated ring
  - Light sensor
  - Ignition key
  - Windscreen washing water level

- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light

- Rear daylight running light

VOLVO				XC90 - XC90 3.2 AWD	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> </ul> </li> </ul>

Anti-block system  
ABS Teves Mk25 VER2

- rear left tire speed
- Brake pedal position sensor
- Voltage at CEM
- Vehicle acceleration
- Front left wheel, speed signal
- Front right wheel, speed signal
- Rear right wheel, speed signal
- Rear left wheel, speed signal
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

• **Actuators**

- Inlet valve: front right front right
- Inlet valve: front left front left
- Exhaust valve: front left front left
- Exhaust valve: front right front right
- Inlet valve: rear right
- Inlet valve: rear left
- Exhaust valve: rear right
- Exhaust valve: rear left
- Pump motor

Gear box control  
6-gears automatic transmission TF80SC

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current

- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay



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Central electronics  
Front central electronics 9.12.2

- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right

- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)

Central electronics  
Central electronics 1.0

- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code

				<ul style="list-style-type: none"> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> </ul> </li> </ul>

Instrument cluster  
Instrument cluster 1.0

- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset

Gear box control  
6-gears automatic transmission TF80SC

- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment

Central electronics  
Front central electronics 9.12.2

- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status
  - Key number
  - Number of authorized keys
  - Ignition switch illuminated ring
  - Light sensor
  - Ignition key
  - Windscreen washing water level
  - Emergency lights switch
  - Front fog lights relay
  - Lights cleaning
  - Fog light switch

2010/08 -	B6324S5	3.2	243	<ul style="list-style-type: none"> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> <li>- Front windscreen wiper</li> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Relay terminal 15</li> <li>- Windscreen wiper switch</li> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>				



- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal

Central electronics  
Central electronics 1.0

- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating

					<ul style="list-style-type: none"> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

VOLVO				XC90 - XC90 3.2 FWD	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Airbag control light</li> <li>- All displays and control lights</li> <li>- ABS control light</li> <li>- Brakes control light</li> <li>- Parking brake, control light</li> <li>- ASR/ESP control light</li> </ul>
	<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ESP test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Brake pressure sensor zero pos. calibration</li> <li>- Lateral acceleration sensor zero position adjustment</li> <li>- Longitudinal acceleration sensor zero position adaptation</li> <li>- Adaptation, steering wheel angle sensor</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Bleed</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Battery voltage</li> <li>- Power supply</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- The ambient temperature</li> <li>- pressure sensor</li> <li>- Lateral acceleration sensor</li> <li>- Driving wheels angle</li> <li>- reflexive angle</li> <li>- Steering wheel angle offset</li> <li>- Longitudinal acceleration</li> <li>- Yaw rate sensor offset</li> <li>- Brake pressure sensor offset</li> <li>- Longitudinal acceleration sensor offset</li> <li>- Lateral acceleration sensor offset</li> <li>- Stored longitudinal acceleration sensor offset</li> <li>- Stored lateral acceleration sensor offset</li> <li>- Stored yaw rate sensor offset</li> <li>- Stored steering angle sensor offset</li> <li>- Stored brake pressure sensor offset</li> <li>- Brake booster vacuum chamber</li> <li>- Brake booster working chamber</li> <li>- LED STC/DSTC button</li> <li>- Front left brake disc temperature</li> <li>- Front right brake disc temperature</li> <li>- Rear left brake disc temperature</li> <li>- Rear right brake disc temperature</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- ABS test</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Battery voltage</li> <li>- stop lights switch</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>

Anti-block system  
ABS Teves Mk25 VER2

- Brake pedal position sensor
- Voltage at CEM
- Vehicle acceleration
- Front left wheel, speed signal
- Front right wheel, speed signal
- Rear right wheel, speed signal
- Rear left wheel, speed signal
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

• **Actuators**

- Inlet valve: front right front right
- Inlet valve: front left front left
- Exhaust valve: front left front left
- Exhaust valve: front right front right
- Inlet valve: rear right
- Inlet valve: rear left
- Exhaust valve: rear right
- Exhaust valve: rear left
- Pump motor

Gear box control  
6-gears automatic transmission TF80SC

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current

- Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay

2006/08 - 2010/07	B6324S	3.2	238	Central electronics Front central electronics 9.12.2	<ul style="list-style-type: none"> <li>- Stand light relay</li> <li>- Relay, daytime running lights</li> <li>- Front left door status</li> <li>- Front right door status</li> <li>- Rear left door status</li> <li>- Rear right door status</li> <li>- Hatchback status</li> <li>- Front left door locking</li> <li>- Front right door locking</li> <li>- Rear left door locking</li> <li>- Rear right door locking</li> <li>- Airbag triggering signal</li> <li>- Alarm LED</li> <li>- Xenon lamp status</li> <li>- Transponder ID received</li> <li>- Immobilizer relay status</li> <li>- Key number</li> <li>- Number of authorized keys</li> <li>- Ignition switch illuminated ring</li> <li>- Light sensor</li> <li>- Ignition key</li> <li>- Windscreen washing water level</li> <li>- Emergency lights switch</li> <li>- Front fog lights relay</li> <li>- Lights cleaning</li> <li>- Fog light switch</li> <li>- Indicator light, hazard warning lights system</li> <li>- Wiper</li> <li>- Front windscreen washer</li> <li>- Front windscreen wiper</li> <li>- Daytime driving light status</li> <li>- Fuel level left side</li> <li>- Fuel level right side</li> <li>- Status Generator</li> <li>- Ambient light sensor</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Relay terminal 15</li> <li>- Windscreen wiper switch</li> <li>- Electronic control unit power supply</li> <li>- One-touch turn signal indication</li> <li>- Rear fog lights switch</li> <li>- Airbag system status</li> <li>- Hood monitoring</li> <li>- Passenger side belt warning</li> <li>- Headlight range control warning signal</li> <li>- Immobilizer: Start authorization</li> <li>- Rear wiper actuation by reverse gear</li> <li>- Battery temperature</li> <li>- Glove box light</li> <li>- Undervoltage shutoff threshold</li> <li>- Selector lever lock status</li> <li>- Dipped beam status</li> <li>- Transponder code</li> <li>- Transponder signal</li> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b></li> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> </ul>
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- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication



Central electronics  
Central electronics 1.0

- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal

				<ul style="list-style-type: none"> <li>- Wiper relay 2</li> <li>- Rear window washer relay</li> <li>- Infotainment relay</li> <li>- Continued operation of headlights</li> <li>- Relay 4 terminal 15</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul> </li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> </ul> </li> </ul>

Instrument cluster  
Instrument cluster 1.0

- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rare right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset

Gear box control  
6-gears automatic transmission TF80SC

- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Transmission control, torque reduction
  - kick-down switch
  - Power supply
  - Engine revolution
  - Passenger compartment temperature
  - The ambient temperature
  - gear box oil temperature
  - transmission ratio
  - battery voltage, terminal 30
  - Solenoid valve: direct gear direct gear
  - Start permission
  - Brake pedal switch
  - Distance
  - Gear lever position
  - Needed gear
  - Gearbox input speed
  - MIL-Status
  - Engine actual moment
  - Transmission output speed
  - Gear box transmission identification
  - Driving speed sensor signal
  - Gearshift solenoid 1
  - Gearshift solenoid 2
  - Transmission selector lever position P
  - Gear position in manual program
  - Fault message
  - Solenoid valve 4 actuation current
  - Solenoid valve 5 actuation current
  - Torque converter lock-up clutch solenoid valve
  - Geartronic
  - Geartronic -
  - Solenoid valve 1, actual current
  - Solenoid valve 2, actual current
  - Solenoid valve 3, actual current
- **Actuators**
  - Gear shift solenoid valve 1
  - Gear shift solenoid valve 2
  - Torque converter lock-up clutch solenoid valve
  - Pressure-regulation magnetic valve 1
  - Pressure-regulation magnetic valve 2
  - Pressure-regulation magnetic valve 3
  - Pressure control solenoid valve 4
  - Pressure control magnetic valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear

Central electronics  
Front central electronics 9.12.2

- Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status
  - Rear right door status
  - Hatchback status
  - Front left door locking
  - Front right door locking
  - Rear left door locking
  - Rear right door locking
  - Airbag triggering signal
  - Alarm LED
  - Xenon lamp status
  - Transponder ID received
  - Immobilizer relay status
  - Key number
  - Number of authorized keys
  - Ignition switch illuminated ring
  - Light sensor
  - Ignition key
  - Windscreen washing water level
  - Emergency lights switch
  - Front fog lights relay
  - Lights cleaning
  - Fog light switch
  - Indicator light, hazard warning lights system

- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status

Central electronics  
Central electronics 1.0

- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights
  - Wiper speed 1 relay
  - Wiper speed 2 relay
  - Windshield washer system relay
  - Relay for horn
  - Ignition switch illuminated ring
  - Selector lever lock
  - Leakage diagnosis pump heating
  - Windshield wiper
  - Fog light



					<ul style="list-style-type: none"> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

VOLVO				XC90 - XC90 D3 FWD	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> <li>- Generator lamp</li> <li>- Brakes control light</li> <li>- ABS control light</li> <li>- Hi-beam lights, control light</li> <li>- Trailer turn sign. indicators, warning light</li> <li>- Fuel level warning lamp</li> <li>- Glow control light</li> <li>- Vehicle speed signal</li> <li>- TCS/ESP OFF warning light</li> <li>- Airbag warning light, status</li> <li>- Parking brake, control light</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Warning lights</li> <li>- Failure lamp</li> <li>- Tank reserve lamp triggering</li> <li>- Gong</li> <li>- Preheat control light</li> <li>- Generator lamp</li> <li>- Hi-beam lights, control light</li> <li>- Rear fog lights control light</li> <li>- Trailer turn signal, control light</li> <li>- Airbag control light</li> </ul> </li> </ul>

- All displays and control lights
- ABS control light
- Brakes control light
- Parking brake, control light
- ASR/ESP control light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay
  - Automatic transmission power supply
  - Selector lever lock relay
  - Relay starter
  - Rear left window
  - Rear right window
  - Childproof lock relay
  - Main beam relay
  - Low-beam relay
  - Stand light relay
  - Relay, daytime running lights
  - Front left door status
  - Front right door status
  - Rear left door status

Central electronics  
Front central electronics 9.12.2

- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump
  - Brake lights
  - Daytime driving light relay
  - Relay for additional lamps
  - Hazard warning lights

- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
  - Alternator voltage functional test
- **Adjustments / settings**
  - Start mode
  - Seat heating adjustment
  - Blower motor, run-on
  - Reset undervoltage counter
  - Reset crash detection signal
  - Adjustment: Lighting on leaving vehicle
  - Adjustment: One-touch turn signal indication
  - Fuel tank cap locking
  - Illumination system
  - Daytime driving light adjustment
  - Rear wiper with reverse gear
  - Dipped beam warning
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Total run
  - Contact switch
  - Fuel pump relay
  - start signal, terminal 50
  - Cruise control
  - Terminal 30
  - Immobilizer
  - engine control unit ignition blocking
  - Terminal 15
  - Start permission
  - Output stage group A
  - Output stage group B
  - Function windscreen washing
  - Function washing rear window washing
  - End position windshield wiper
  - Tank filling door
  - Stationary heater/ventilation activation
  - Supply voltage term.30
  - Switch identification
  - Vehicle model
  - Transponder
  - Signal horn
  - Vehicle information (VIN)
  - Transponder communication
  - Generator, L-Signal
  - Headlight level control signal
  - Left xenon lamp signal
  - Right xenon lamp signal
  - Power supply relay

Central electronics  
Central electronics 1.0

- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

					<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>- electric fuel pump relay</li> <li>- Parking lights, front left</li> <li>- Parking lights, front right</li> <li>- Short lights, left</li> <li>- Short lights, right</li> <li>- windscreen washing pump</li> <li>- Rear window washer pump</li> <li>- Rear window washing pump</li> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul>

VOLVO				XC90 - XC90 T5 AWD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Read configuration</li> <li>- Option display configuration</li> <li>- Service interval adaptation</li> <li>- Service interval display reset</li> <li>- Activate/deactivate belt warning</li> <li>- Parking brake warning tone</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Failure lamp</li> <li>- Engine revolution</li> <li>- Warning lights</li> <li>- Kilometer reading</li> <li>- Fuel level in the tank</li> <li>- Rear fog light</li> <li>- Cooling agent temperature motor</li> <li>- Airbag signal lamp</li> <li>- Cruise control, control light</li> <li>- Oil pressure control lamp</li> </ul>

Instrument cluster  
Instrument cluster 1.0

- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
  - Warning lights
  - Failure lamp
  - Tank reserve lamp triggering
  - Gong
  - Preheat control light
  - Generator lamp
  - Hi-beam lights, control light
  - Rear fog lights control light
  - Trailer turn signal, control light
  - Airbag control light
  - All displays and control lights
  - ABS control light
  - Brakes control light
  - Parking brake, control light
  - ASR/ESP control light

Anti-block system  
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
  - ABS test
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Battery voltage
  - stop lights switch
  - front left tire speed
  - front right tire speed
  - rear right tire speed
  - rear left tire speed
  - Brake pedal position sensor
  - Voltage at CEM
  - Vehicle acceleration
  - Front left wheel, speed signal
  - Front right wheel, speed signal
  - Rear right wheel, speed signal
  - Rear left wheel, speed signal
  - Front left brake disc temperature
  - Front right brake disc temperature
  - Rear left brake disc temperature
  - Rear right brake disc temperature
- **Actuators**
  - Inlet valve: front right front right
  - Inlet valve: front left front left
  - Exhaust valve: front left front left
  - Exhaust valve: front right front right
  - Inlet valve: rear right
  - Inlet valve: rear left
  - Exhaust valve: rear right
  - Exhaust valve: rear left
  - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Adaptive parameters reset
  - Transm. oil change interval reset

Gear box control  
5-gears automatic transmission 55-  
50/51SN2.0

- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
  - Start gear indicator mode
  - Start test mode
- **Error memory**
- **Current values**
  - Accelerator pedal position
  - Coolant temperature
  - Battery voltage
  - Driving speed
  - Gear lever AT position
  - kick-down switch
  - Solenoid valve 1/2
  - Engine revolution
  - Solenoid valve 3
  - stop lights switch
  - Winter switch
  - Passenger compartment temperature
  - Control unit power supply
  - Inserted gear
  - system power supply
  - Engine status
  - gear box oil temperature
  - transmission ratio
  - gear box control error
  - Solenoid switch valve 1
  - Solenoid switch valve 2
  - Solenoid switch valve 3
  - Solenoid switch valve 4
  - Direct transmission Converter lockup
  - modulating pressure: solenoid valve 1
  - modulating pressure: solenoid valve 2
  - Torque limitation
  - Kilometer reading
  - Gearbox input speed
  - Gearbox speed sensor (input)
  - Solenoid valve 4/5
  - Solenoid switch valve 5
  - Transmission output speed
  - Engine torque
  - Ambient temperature
  - Transformer bridging magnetic valve
  - Transmission oil temperature sensor voltage
  - Selector lever module
  - Torque reduction on changing gear
  - Transmission output torque
  - Transmission oil temper. on starting
  - Time within 100 - 110 °C
  - Time within 110 - 120 °C
  - Time within 120 - 130 °C
  - Time within 130 - 140 °C
  - Time within 140 - 150 °C
  - Time > 150 °C
  - Press. regul. sol. valve 1 set value
  - Pressure regulator solenoid valve 1 actual value
  - Pressure regulator solenoid valve 2 set value
  - Pressure regulator solenoid valve 2 actual value
  - Set value, solenoid valve, torque conv. lock-up
  - Converter bridging solenoid valve actual pressure
  - Geartronic
  - Geartronic
  - Geartronic -
  - Winter mode
  - Gear ratio actual value
  - Gear ratio set value
  - Start release by selector lever module



2012/08 -	B5254T9	2.5	209	<ul style="list-style-type: none"> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Solenoid switch valve 1</li> <li>- Solenoid switch valve 2</li> <li>- Solenoid switch valve 3</li> <li>- Solenoid switch valve 4</li> <li>- Solenoid valve: direct gear direct gear</li> <li>- modulating pressure: solenoid valve 1</li> <li>- modulating pressure: solenoid valve 2</li> <li>- Solenoid switch valve 5</li> </ul> </li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Functional tests</b> <ul style="list-style-type: none"> <li>- Alternator voltage functional test</li> </ul> </li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Start mode</li> <li>- Seat heating adjustment</li> <li>- Blower motor, run-on</li> <li>- Reset undervoltage counter</li> <li>- Reset crash detection signal</li> <li>- Adjustment: Lighting on leaving vehicle</li> <li>- Adjustment: One-touch turn signal indication</li> <li>- Fuel tank cap locking</li> <li>- Illumination system</li> <li>- Daytime driving light adjustment</li> <li>- Rear wiper with reverse gear</li> <li>- Dipped beam warning</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Total run</li> <li>- Contact switch</li> <li>- Fuel pump relay</li> <li>- start signal, terminal 50</li> <li>- Cruise control</li> <li>- Terminal 30</li> <li>- Immobilizer</li> <li>- engine control unit ignition blocking</li> <li>- Terminal 15</li> <li>- Start permission</li> <li>- Output stage group A</li> <li>- Output stage group B</li> <li>- Function windscreen washing</li> <li>- Function washing rear window washing</li> <li>- End position windshield wiper</li> <li>- Tank filling door</li> <li>- Stationary heater/ventilation activation</li> <li>- Supply voltage term.30</li> <li>- Switch identification</li> <li>- Vehicle model</li> <li>- Transponder</li> <li>- Signal horn</li> <li>- Vehicle information (VIN)</li> <li>- Transponder communication</li> <li>- Generator, L-Signal</li> <li>- Headlight level control signal</li> <li>- Left xenon lamp signal</li> <li>- Right xenon lamp signal</li> <li>- Power supply relay</li> <li>- Automatic transmission power supply</li> <li>- Selector lever lock relay</li> <li>- Relay starter</li> <li>- Rear left window</li> <li>- Rear right window</li> <li>- Childproof lock relay</li> <li>- Main beam relay</li> <li>- Low-beam relay</li> <li>- Stand light relay</li> </ul> </li> </ul>
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Central electronics  
Central electronics 1.0

- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
  - electric fuel pump relay
  - Parking lights, front left
  - Parking lights, front right
  - Short lights, left
  - Short lights, right
  - windscreen washing pump
  - Rear window washer pump
  - Rear window washing pump

				<ul style="list-style-type: none"> <li>- Brake lights</li> <li>- Daytime driving light relay</li> <li>- Relay for additional lamps</li> <li>- Hazard warning lights</li> <li>- Wiper speed 1 relay</li> <li>- Wiper speed 2 relay</li> <li>- Windshield washer system relay</li> <li>- Relay for horn</li> <li>- Ignition switch illuminated ring</li> <li>- Selector lever lock</li> <li>- Leakage diagnosis pump heating</li> <li>- Windshield wiper</li> <li>- Fog light</li> <li>- rear left el. window lifter open</li> <li>- rear left el. window lifter closed</li> <li>- rear right el. window lifter open</li> <li>- rear right el. window lifter closed</li> <li>- Relay for parking lights</li> <li>- Relay for low-beam headlights</li> <li>- Relay for high-beam headlights</li> <li>- Left daylight running light</li> <li>- Rear daylight running light</li> </ul>
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Control unit, power supply</li> <li>- Driving wheels angle</li> <li>- Steering wheel rotational speed</li> <li>- Steering angle</li> <li>- Central electronics power supply</li> </ul> </li> </ul>

[Beetle \[5C1\] - Beetle 1.2 TSI](#)  
[Beetle \[5C1\] - Beetle 1.4 TSI](#)  
[Beetle \[5C1\] - Beetle 1.6 TDI](#)  
[Beetle \[5C1\] - Beetle 2.0 TSI](#)  
[Beetle \[5C1\] - Beetle 2.0 TDI](#)  
[Beetle \[5C7\] Cabriolet - Beetle 1.2 TSI Cabriolet](#)  
[Beetle \[5C7\] Cabriolet - Beetle 1.4 TSI Cabriolet](#)  
[Beetle \[5C7\] Cabriolet - Beetle 1.6 TDI Cabriolet](#)  
[Beetle \[5C7\] Cabriolet - Beetle 2.0 TDI Cabriolet](#)  
[Beetle \[5C7\] Cabriolet - Beetle 2.0 TSI Cabriolet](#)  
[Beetle \[5C7\] Cabriolet - Beetle 2.5 Cabriolet](#)  
[Beetle \[5C7\] Cabriolet - Beetle 2.5 TFSI Cabriolet](#)  
[CC \[358\] - CC 1.4 TSI](#)  
[CC \[358\] - CC 1.8 TSI](#)  
[CC \[358\] - CC 2.0 TSI](#)  
[CC \[358\] - CC 3.6 FSI 4Motion](#)  
[CC \[358\] - CC 2.0 TDI](#)  
[CC \[358\] - CC 2.0 TDI 4Motion](#)  
[CC \[358\] - CC 2.0 TFSI](#)  
[Dasher \[32\] - Dasher 1.6 Diesel](#)  
[Golf Plus \[521\] - Golf Plus 1.4](#)  
[Golf Plus \[521\] - Golf Plus 1.6](#)  
[Golf Plus \[521\] - Golf Plus 1.4 TSI](#)  
[Golf Plus \[521\] - Golf Plus 1.2 TSI](#)  
[Golf Plus \[521\] - Golf Plus 1.6 BiFuel](#)  
[Golf Plus \[521\] - Golf Plus 1.6 TDI](#)  
[Golf Plus \[521\] - Golf Plus 2.0 TDI](#)  
[Golf Plus \[521\] - Golf Plus 1.4 FSI](#)  
[Golf VI - Golf VI 1.4 TSI](#)  
[Golf VI - Golf VI 2.0 GTI](#)  
[Golf VI \[517\] Cabrio - Golf VI 1.2 TSI Cabrio](#)  
[Golf VI \[517\] Cabrio - Golf VI 1.4 TSI Cabrio](#)  
[Golf VI \[517\] Cabrio - Golf VI 1.6 TDI Cabrio](#)  
[Golf VI \[517\] Cabrio - Golf VI 2.0 TDI Cabrio](#)  
[Golf VI \[517\] Cabrio - Golf VI 2.0 TSI Cabrio](#)  
[Golf VI \[5K1\] - Golf VI 1.4](#)  
[Golf VI \[5K1\] - Golf VI 1.6](#)  
[Golf VI \[5K1\] - Golf VI 1.4 TSI](#)  
[Golf VI \[5K1\] - Golf VI 1.6 BiFuel](#)  
[Golf VI \[5K1\] - Golf VI 1.6 TDI](#)  
[Golf VI \[5K1\] - Golf VI 2.0 TDI](#)  
[Golf VI \[5K1\] - Golf VI 2.0 GTI](#)  
[Golf VI \[5K1\] - Golf VI 2.0 TDI 4Motion](#)  
[Golf VI \[5K1\] - Golf VI 1.2 TSI](#)  
[Golf VI \[5K1\] - Golf VI 2.0 TSI 4Motion](#)  
[Golf VI \[5K1\] - Golf VI 2.5](#)

[Golf VI \[5K1\] - Golf VI 1.6 TDI 4Motion](#)  
[Golf VI \[5K1\] - Golf VI 1.8 TSI](#)  
[Golf VI \[5K1\] - Golf VI 2.0 4Motion](#)  
[Golf VI \[AJ5\] Variant - Golf VI 1.2 TSI Variant](#)  
[Golf VI \[AJ5\] Variant - Golf VI 2.0 TDI Variant](#)  
[Golf VI \[AJ5\] Variant - Golf VI 1.6 Variant](#)  
[Golf VI \[AJ5\] Variant - Golf VI 1.4 Variant](#)  
[Golf VI \[AJ5\] Variant - Golf VI 1.4 TSI Variant](#)  
[Golf VI \[AJ5\] Variant - Golf VI 1.6 TDI Variant](#)  
[Golf VI \[AJ5\] Variant - Golf VI 2.0 TSI Variant](#)  
[Golf VI \[AJ5\] Variant - Golf VI 1.6 TDI Variant 4Motion](#)  
[Golf VII \[5G1\] - Golf VII 1.2 TSI](#)  
[Golf VII \[5G1\] - Golf VII 1.4 TSI](#)  
[Golf VII \[5G1\] - Golf VII 1.4 TSI ACT](#)  
[Golf VII \[5G1\] - Golf VII 1.6 TDI](#)  
[Golf VII \[5G1\] - Golf VII 1.6 TDI 4Motion](#)  
[Golf VII \[5G1\] - Golf VII 2.0 TDI](#)  
[Golf VII \[5G1\] - Golf VII 1.4 TSI MultiFuel](#)  
[Golf VII \[5G1\] - Golf VII 2.0 TDI 4Motion](#)  
[Passat \[357\] CC - Passat 3.6 FSI CC 4Motion](#)  
[Passat \[357\] CC - Passat 1.8 TSI CC](#)  
[Passat \[357\] CC - Passat 2.0 TDI CC](#)  
[Passat \[357\] CC - Passat 2.0 TSI CC](#)  
[Passat \[357\] CC - Passat 3.6 FSI CC](#)  
[Passat \[357\] CC - Passat 2.0 TDI CC 4Motion](#)  
[Passat \[357\] CC - Passat 1.4 TSI CC](#)  
[Passat \[362\] - Passat 1.4 TSI](#)  
[Passat \[362\] - Passat 1.4 TSI EcoFuel](#)  
[Passat \[362\] - Passat 1.8 FSI](#)  
[Passat \[362\] - Passat 2.0 TSI](#)  
[Passat \[362\] - Passat 1.6 TDI](#)  
[Passat \[362\] - Passat 2.0 TDI](#)  
[Passat \[362\] - Passat 2.0 TDI 4Motion](#)  
[Passat \[362\] - Passat 3.6 V6 4Motion](#)  
[Passat \[362\] - Passat 1.8 TSI](#)  
[Passat \[365\] Alltrack - Passat 1.8 TSI Alltrack](#)  
[Passat \[365\] Alltrack - Passat 2.0 TDI Alltrack](#)  
[Passat \[365\] Alltrack - Passat 2.0 TDI Alltrack 4Motion](#)  
[Passat \[365\] Alltrack - Passat 2.0 TSI Alltrack 4Motion](#)  
[Passat \[365\] Variant - Passat 1.4 TSI Variant](#)  
[Passat \[365\] Variant - Passat 1.4 TSI EcoFuel Variant](#)  
[Passat \[365\] Variant - Passat 1.6 TDI Variant](#)  
[Passat \[365\] Variant - Passat 1.8 FSI Variant](#)  
[Passat \[365\] Variant - Passat 2.0 TDI Variant](#)  
[Passat \[365\] Variant - Passat 2.0 TDI Variant 4Motion](#)  
[Passat \[365\] Variant - Passat 2.0 TSI Variant](#)  
[Passat \[365\] Variant - Passat 3.6 V6 Variant 4Motion](#)  
[Passat \[365\] Variant - Passat 1.8 TSI Variant](#)

[Passat \[3C2\] - Passat 2.0 TSI](#)  
[Passat \[3C2\] - Passat 3.2 FSI 4Motion](#)  
[Passat \[3C2\] - Passat 1.9 TDI](#)  
[Passat \[3C2\] - Passat 2.0 TDI](#)  
[Passat \[3C2\] - Passat 1.6 FSI](#)  
[Passat \[3C2\] - Passat 2.0 FSI](#)  
[Passat \[3C2\] - Passat 2.0 FSI 4Motion](#)  
[Passat \[3C2\] - Passat 1.6](#)  
[Passat \[3C2\] - Passat 2.0 TDI 4Motion](#)  
[Passat \[3C2\] - Passat 3.6 FSI 4Motion](#)  
[Passat \[3C2\] - Passat 3.6 FSI](#)  
[Passat \[3C2\] - Passat 3.6 FSI R36 4Motion](#)  
[Passat \[3C2\] - Passat 1.4 TSI](#)  
[Passat \[3C2\] - Passat 1.4 TSI EcoFuel](#)  
[Passat \[3C2\] - Passat 1.8 TSI](#)  
[Passat \[3C2\] - Passat 1.6 TDI](#)  
[Passat \[3C2\] - Passat 1.8 FSI](#)  
[Passat \[3C5\] Variant - Passat 2.0 TSI Variant](#)  
[Passat \[3C5\] Variant - Passat 3.2 FSI Variant 4Motion](#)  
[Passat \[3C5\] Variant - Passat 1.9 TDI Variant](#)  
[Passat \[3C5\] Variant - Passat 2.0 TDI Variant](#)  
[Passat \[3C5\] Variant - Passat 2.0 TDI Variant 4Motion](#)  
[Passat \[3C5\] Variant - Passat 1.6 FSI Variant](#)  
[Passat \[3C5\] Variant - Passat 2.0 FSI Variant](#)  
[Passat \[3C5\] Variant - Passat 1.6 Variant](#)  
[Passat \[3C5\] Variant - Passat 2.0 FSI Variant 4Motion](#)  
[Passat \[3C5\] Variant - Passat 3.6 FSI Variant](#)  
[Passat \[3C5\] Variant - Passat 3.6 FSI Variant 4Motion](#)  
[Passat \[3C5\] Variant - Passat 3.6 FSI R36 Variant 4Motion](#)  
[Passat \[3C5\] Variant - Passat 1.4 TSI Variant](#)  
[Passat \[3C5\] Variant - Passat 1.8 TSI Variant](#)  
[Passat \[3C5\] Variant - Passat 1.4 TSI EcoFuel Variant](#)  
[Passat \[3C5\] Variant - Passat 1.6 TDI Variant](#)  
[Passat \[3C5\] Variant - Passat 1.8 FSI Variant](#)  
[Sharan \[7N1\] - Sharan 1.4 TSI](#)  
[Sharan \[7N1\] - Sharan 2.0 TDI](#)  
[Sharan \[7N1\] - Sharan 2.0 TDI 4Motion](#)  
[Sharan \[7N1\] - Sharan 2.0 TSI](#)  
[Touareg \[7P5\] - Touareg 3.0 FSI Hybrid](#)  
[Touareg \[7P5\] - Touareg 3.0 TDI](#)  
[Touareg \[7P5\] - Touareg 4.2 TDI](#)  
[Touareg \[7P5\] - Touareg 4.2 FSI](#)  
[Touareg \[7P5\] - Touareg 3.6 FSI](#)

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code received</li> <li>- Tire pressure sensor 4: Actual pressure</li> <li>- Tire pressure sensor 4: Specified pressure</li> </ul> </li> </ul>

2011/07 -	CBZB	1.2	105	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>- Tire pressure sensor 4: Wheel position</li> <li>- Wheel set 1 specified pressure, front axle, partially loaded</li> <li>- Wheel set 1 specified pressure, front axle, fully loaded</li> <li>- Wheel set 1 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 1 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> </ul>
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					<p>loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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VW Beetle [5C1] - Beetle 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> </ul> </li> </ul>

- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded

2011/10  
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CAVD

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Tire control system  
Tire pressure monitor 4.0

- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded

				<ul style="list-style-type: none"> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> </ul> </li> </ul>

- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded

- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set

					<ul style="list-style-type: none"> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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VW Beetle [5C1] - Beetle 1.6 TDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> </ul> </li> </ul>

2011/10 -	CAYC	1.6	105	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code received</li> <li>- Tire pressure sensor 4: Actual pressure</li> <li>- Tire pressure sensor 4: Specified pressure</li> <li>- Tire pressure sensor 4: Wheel position</li> <li>- Wheel set 1 specified pressure, front axle, partially loaded</li> <li>- Wheel set 1 specified pressure, front axle, fully loaded</li> <li>- Wheel set 1 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 1 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> </ul>
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- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure

					<ul style="list-style-type: none"> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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**VW Beetle [5C1] - Beetle 2.0 TSI**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> </ul> </li> </ul>

2011/07  
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2.0

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Tire control system  
Tire pressure monitor 4.0

- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded

- loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature
- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

• **Identification**

- **Clear errors**
- **Adjustments / settings**
  - Tire pressure monitor individual specified pressure adjustment
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - CAN communication
  - Supply voltage term.30
  - Tire pressure monitoring status
  - Transportation mode
  - System status
  - Inflation pressure sensor 1 Temperature
  - Inflation pressure sensor 2 Temperature
  - Inflation pressure sensor 3 Temperature
  - Inflation pressure sensor 4 Temperature
  - Inflation pressure sensor 1 Sensor code
  - Inflation pressure sensor 2 Sensor code
  - Inflation pressure sensor 3 Sensor code
  - Inflation pressure sensor 4 Sensor code
  - Radio interference
  - Load status selected
  - Warning: Check front left tire pressure
  - Warning: Check front right tire pressure
  - Tire pressure sensor 1: Actual pressure
  - Tire pressure sensor 1: Specified pressure
  - Tire pressure sensor 1: Wheel position
  - Tire pressure sensor 2: Actual pressure
  - Tire pressure sensor 2: Specified pressure
  - Tire pressure sensor 2: Wheel position
  - Tire pressure sensor 3: Actual pressure
  - Tire pressure sensor 3: Specified pressure
  - Tire pressure sensor 3: Wheel position
  - Designation wheel set 1
  - Designation wheel set 2
  - Designation wheel set 3
  - Designation wheel set 4
  - Designation wheel set 5
  - Designation wheel set 6
  - Designation wheel set 7
  - Designation wheel set 8
  - Designation wheel set 9
  - Designation wheel set 10
  - Currently monitored wheel set
  - Designation of currently monitored wheel set
  - Warning: Front left tire flat
  - Warning: Front right tire flat
  - Warning: Rear left tire flat
  - Warning: Rear right tire flat
  - Designation wheel set 11
  - Vehicle speed CAN message
  - CAN message voltage terminal 30
  - Tire pressure sensor: Last actual temperature received
  - Tire pressure sensor: Last actual pressure received
  - Tire pressure monitor sensor: Last wheel position received
  - Tire pressure monitor sensor: Last sensor code received
  - Tire pressure sensor 4: Actual pressure
  - Tire pressure sensor 4: Specified pressure
  - Tire pressure sensor 4: Wheel position
  - Wheel set 1 specified pressure, front axle, partially loaded
  - Wheel set 1 specified pressure, front axle, fully loaded
  - Wheel set 1 specified pressure, rear axle,

2011/04 -	CBFA	2.0	200	Tire control system Tire pressure monitor 4.0	<p>partially loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 1 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle,</li> </ul>
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					<ul style="list-style-type: none"> <li>partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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VW					Beetle [5C1] - Beetle 2.0 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> </ul> </li> </ul>	

- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle,



2012/04 - 2012/07	CFFB	2.0	140	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle,</li> </ul>
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					<p>partially loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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VW Beetle [5C7] Cabriolet - Beetle 1.2 TSI Cabriolet					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> </ul> </li> </ul>

2013/01  
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CBZB

1.2

105

Tire control system  
Tire pressure monitor 4.0

- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded

- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set

					<ul style="list-style-type: none"> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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VW					Beetle [5C7] Cabriolet - Beetle 1.4 TSI Cabriolet	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> </ul> </li> </ul>	

					<ul style="list-style-type: none"> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code received</li> <li>- Tire pressure sensor 4: Actual pressure</li> <li>- Tire pressure sensor 4: Specified pressure</li> <li>- Tire pressure sensor 4: Wheel position</li> <li>- Wheel set 1 specified pressure, front axle, partially loaded</li> <li>- Wheel set 1 specified pressure, front axle, fully loaded</li> <li>- Wheel set 1 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 1 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully</li> </ul>
2013/01 -	CTHD	1.4	160	Tire control system Tire pressure monitor 4.0	

- loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified

					pressure - Rear left tire pressure sensor specified pressure pressure - Rear right tire pressure sensor specified pressure pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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**VW Beetle [5C7] Cabriolet - Beetle 1.6 TDI Cabriolet**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> </ul> </li> </ul>



2013/01  
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CAYC

1.6

105

Tire control system  
Tire pressure monitor 4.0

- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded

- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature
- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code received</li> <li>- Tire pressure sensor 4: Actual pressure</li> <li>- Tire pressure sensor 4: Specified pressure</li> <li>- Tire pressure sensor 4: Wheel position</li> </ul> </li> </ul>

2013/01	CFFB	2.0	140	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>- Wheel set 1 specified pressure, front axle, partially loaded</li> <li>- Wheel set 1 specified pressure, front axle, fully loaded</li> <li>- Wheel set 1 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 1 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> </ul>
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					<ul style="list-style-type: none"> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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VW Beetle [5C7] Cabriolet - Beetle 2.0 TSI Cabriolet					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> </ul> </li> </ul>

- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle,

2013/01  
-

CCZA

2.0

200

Tire control system  
Tire pressure monitor 4.0

- partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle,

					<p>partially loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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VW Beetle [5C7] Cabriolet - Beetle 2.5 Cabriolet					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> </ul> </li> </ul>



- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded

2012/09 -	CBUA	2.5	152	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> </ul>
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					<ul style="list-style-type: none"> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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VW Beetle [5C7] Cabriolet - Beetle 2.5 TFSI Cabriolet					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> </ul> </li> </ul>

2012/09 -	CCTA	2.0	0	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code received</li> <li>- Tire pressure sensor 4: Actual pressure</li> <li>- Tire pressure sensor 4: Specified pressure</li> <li>- Tire pressure sensor 4: Wheel position</li> <li>- Wheel set 1 specified pressure, front axle, partially loaded</li> <li>- Wheel set 1 specified pressure, front axle, fully loaded</li> <li>- Wheel set 1 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 1 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> </ul>
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loaded

- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure

					<ul style="list-style-type: none"> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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<b>VW</b>	<b>CC [358] - CC 1.4 TSI</b>
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Year	Engine	Liters	HP	System	Functions
2011/11 -	CKMA	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

2012/11 -	CTHD	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW CC [358] - CC 1.8 TSI					
Year	Engine	Liters	HP	System	Functions
2011/11				Cruise control	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> </ul>

-	CDA	1.8	160	ACC 3.1	<ul style="list-style-type: none"> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					CC [358] - CC 2.0 TSI	
Year	Engine	Liters	HP	System	Functions	
2011/11 -	CCZB	2.0	211	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> </ul>	



					<ul style="list-style-type: none"> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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**VW CC [358] - CC 3.6 FSI 4Motion**

Year	Engine	Liters	HP	System	Functions
2011/11 -	BWS	3.6	299	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

**VW CC [358] - CC 2.0 TDI**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> </ul> </li> </ul>

2011/11 -	CFFA	2.0	136	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2011/11 - 2013/01	CFGB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> </ul>

					<ul style="list-style-type: none"> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <ul style="list-style-type: none"> <li>• <b>Actuators</b></li> </ul>
2012/01 -	CLLA	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <ul style="list-style-type: none"> <li>• <b>Actuators</b></li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> </ul>

2012/12 -	CFGC	2.0	177	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW						CC [358] - CC 2.0 TDI 4Motion					
Year	Engine	Liters	HP	System	Functions						
2011/11 -	CFFB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> </ul> </li> </ul>						

					<ul style="list-style-type: none"> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2011/11 - 2013/01	CFGB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> </ul>

2012/12 -	CFGC	2.0	177	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW CC [358] - CC 2.0 TFSI					
Year	Engine	Liters	HP	System	Functions
2011/11 -	CCTA	2.0	203	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Dasher [32] - Dasher 1.6 Diesel					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side</li> </ul> </li> <li>front           <ul style="list-style-type: none"> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> </ul> </li> <li>side           <ul style="list-style-type: none"> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side</li> </ul> </li> <li>front           <ul style="list-style-type: none"> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side</li> </ul> </li> <li>front           <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> </ul> </li> <li>side           <ul style="list-style-type: none"> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2:</li> </ul> </li> </ul>

1980/09  
-  
1981/08

CR

1.6

54

Airbag  
Airbag AB 20 UDS

Ohm value

- Driver side front side airbag ignition circuit: Ohm value

- Passenger side front side airbag ignition circuit: Ohm value

- Driver side rear side airbag ignition circuit: Ohm value

- Passenger side rear side airbag ignition circuit: Ohm value

- Driver side windowbag ignition circuit: Ohm value

- Passenger side windowbag ignition circuit: Ohm value

- Driver side front kneebag ignition circuit: Ohm value

- Passenger side front kneebag ignition circuit: Ohm value

- Driver side front belt tensioner ign.circuit: Ohm value

- Passenger side front belt tensioner ign.circuit: Ohm value

- Ignition circuit 2,belt tensioner,front driver side:Ohm value

- Ignition circuit 2,belt tensioner,front pass. side:Ohm value

- Driver side front belt force limiter ign.circuit: Ohm value

- Passenger side front belt force limiter ign.circuit: Ohm value

- Driver side rear belt tensioner ign.circuit: Ohm value

- Passenger side rear belt tensioner ign.circuit: Ohm value

- Battery isolator ignition circuit: Ohm value

- Driver side front seat position sensor: Current value

- Passenger side front seat position sensor: Current value

- Driver side 2nd row belt switch: Ohm value

- Passenger side 2nd row belt switch: Ohm value

- 2nd row center belt switch: Ohm value

- Driver side 3rd row belt switch: Ohm value

- Passenger side 3rd row belt switch: Ohm value

- Driver side front buckle switch: Ohm value

- Passenger side front buckle switch: Ohm value

- Seat occupied sensor: Ohm value

- Driving profile selection system status

- Left belt tensioner fault status

- Right belt tensioner fault status

- Driver side rollover protection trigger

- Passenger side rollover protection trigger

- Passenger side rollover protection trigger: Ohm value

- Driver side rollover protection trigger: Ohm value

- Right belt tensioner: Terminal 15

- Right belt tensioner: Power supply

- Right belt tensioner: Current input

- Left belt tensioner: Current input

- Left belt tensioner: Terminal 15

- Left belt tensioner: Power supply

- Left belt tensioner: Temperature

- Right belt tensioner: Temperature

- Left belt tensioner: tensioning cycle characteristic 1

- Left belt tensioner: tensioning cycle characteristic 2

- Left belt tensioner: tensioning cycle



					<p>characteristic 3</p> <ul style="list-style-type: none"> <li>- Left belt tensioner: tensioning cycle</li> </ul> <p>characteristic 4</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 1</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 2</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 3</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle</li> </ul> <p>characteristic 4</p> <ul style="list-style-type: none"> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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VW Golf Plus [521] - Golf Plus 1.4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> </ul> </li> </ul>

2009/01 -	CGGA	1.4	80	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2009/05 - 2011/06	BUD	1.4	80	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> </ul>

					<ul style="list-style-type: none"> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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**VW Golf Plus [521] - Golf Plus 1.6**

Year	Engine	Liters	HP	System	Functions
2009/05 -	BSE	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> </ul> <p>• <b>Actuators</b></p>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

2009/01 -	BSF	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> <li>module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> <li>• <b>Actuators</b></li> </ul>
2010/05 -	CMXA	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> </ul>

					<ul style="list-style-type: none"> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW Golf Plus [521] - Golf Plus 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
2009/01 -	CAXA	1.4	122	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul>

2009/01 - 2012/09	CAVD	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> </ul> </li> </ul>

2012/05 -	CTHD	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW Golf Plus [521] - Golf Plus 1.2 TSI					
Year	Engine	Liters	HP	System	Functions
2009/08 -	CBZB	1.2	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2010/05 -	CBZA	1.2	86	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> </ul> <p>• <b>Actuators</b></p>

VW Golf Plus [521] - Golf Plus 1.6 BiFuel					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> </ul> </li> </ul>



2009/05 -	CHGA	1.6	98 - 102	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW Golf Plus [521] - Golf Plus 1.6 TDI					
Year	Engine	Liters	HP	System	Functions
2009/05 -	CAYB	1.6	90	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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**VW Golf Plus [521] - Golf Plus 2.0 TDI**

Year	Engine	Liters	HP	System	Functions
2009/01 - 2010/05	CBDC	2.0	110	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

2009/01 - 2009/11	CBDB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> <li>module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> <li>• <b>Actuators</b></li> </ul>
2009/11 -	CFHC	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> </ul>

					<ul style="list-style-type: none"> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2010/05 -	CLCA	2.0	110	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>

Year	Engine	Liters	HP	System	Functions
2009/05 - 2010/12	BLN	1.4	90	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

VW Golf VI - Golf VI 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> </ul> </li> </ul>

2009/10 -	CFB	1.4	131	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Golf VI - Golf VI 2.0 GTI					
Year	Engine	Liters	HP	System	Functions
2010/02 -	CGM	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul>

					module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <b>• Actuators</b>
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VW Golf VI [517] Cabrio - Golf VI 1.2 TSI Cabrio					
Year	Engine	Liters	HP	System	Functions
2011/03 -	CBZB	1.2	105	Cruise control ACC 3.1	<b>• Identification</b> <b>• Clear errors</b> <b>• Error memory</b> <b>• Current values</b> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <b>• Actuators</b>

VW Golf VI [517] Cabrio - Golf VI 1.4 TSI Cabrio					
Year	Engine	Liters	HP	System	Functions
					<b>• Identification</b> <b>• Clear errors</b>

<p>2011/03 - 2012/09</p>	<p>CAVD</p>	<p>1.4</p>	<p>160</p>	<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> <li>module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> </ul>
<p>2011/11 -</p>	<p>CAXA</p>	<p>1.4</p>	<p>122</p>	<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2012/09 -	CTHD	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>

Year	Engine	Liters	HP	System	Functions
2011/03 -	CAYC	1.6	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

VW Golf VI [517] Cabrio - Golf VI 2.0 TDI Cabrio					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> </ul> </li> </ul>

2011/11 -	CFHC	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <ul style="list-style-type: none"> <li>• <b>Actuators</b></li> </ul>
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VW					
Golf VI [517] Cabrio - Golf VI 2.0 TSI Cabrio					
Year	Engine	Liters	HP	System	Functions
2012/05 -	CCZB	2.0	211	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul>

					<ul style="list-style-type: none"> <li>module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2013/01 -	CDLA	2.0	265	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>

VW Golf VI [5K1] - Golf VI 1.4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> </ul> </li> </ul>

2008/10 - 2012/11	CGGA	1.4	80	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW Golf VI [5K1] - Golf VI 1.6					
Year	Engine	Liters	HP	System	Functions
2008/10 - 2012/11	BSE	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2008/10 - 2010/05	CCSA	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

2010/05 - 2012/11	CMXA	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> <li>• <b>Actuators</b></li> </ul>
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VW					
Golf VI [5K1] - Golf VI 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> </ul>

2008/10 - 2012/11	CAXA	1.4	122	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2012/09 - 2012/11	CTHD	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>



VW Golf VI [5K1] - Golf VI 1.6 BiFuel					
Year	Engine	Liters	HP	System	Functions
2008/11 - 2012/11	CHGA	1.6	98 - 102	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

VW Golf VI [5K1] - Golf VI 1.6 TDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> </ul> </li> </ul>

2009/02 - 2012/11	CAYB	1.6	90	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2008/12 - 2012/11	CAYC	1.6	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p>

					<ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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**VW Golf VI [5K1] - Golf VI 2.0 TDI**

Year	Engine	Liters	HP	System	Functions
2008/10 - 2009/05	CBDC	2.0	110	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> </ul> </li> </ul>

2008/10 - 2009/11	CBAB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2009/04 - 2010/05	CBBB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> </ul>

					<ul style="list-style-type: none"> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <ul style="list-style-type: none"> <li>• <b>Actuators</b></li> </ul>
2009/11 - 2012/11	CFGB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <ul style="list-style-type: none"> <li>• <b>Actuators</b></li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> </ul>

2009/09 - 2012/11	CJAA	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2010/05 - 2012/11	CLCA	2.0	110	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> </ul>

					<ul style="list-style-type: none"> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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**VW Golf VI [5K1] - Golf VI 2.0 GTI**

Year	Engine	Liters	HP	System	Functions
2009/04 - 2012/11	CCZB	2.0	211	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> </ul> <p>• <b>Actuators</b></p>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>

2009/07 -	CBFA	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2011/05 - 2012/11	CDLG	2.0	235	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> </ul>



					<ul style="list-style-type: none"> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <ul style="list-style-type: none"> <li>• <b>Actuators</b></li> </ul>
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VW Golf VI [5K1] - Golf VI 2.0 TDI 4Motion					
Year	Engine	Liters	HP	System	Functions
2008/10 - 2009/11	CBAB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> </ul> module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <ul style="list-style-type: none"> <li>• <b>Actuators</b></li> </ul>

2009/11 - 2012/11	CFFB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
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VW					
Golf VI [5K1] - Golf VI 1.2 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> </ul> </li> </ul>

2009/05 - 2012/11	CBZB	1.2	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2010/05 - 2012/11	CBZA	1.2	86	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> <li>• <b>Actuators</b></li> </ul>
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**VW Golf VI [5K1] - Golf VI 2.0 TSI 4Motion**

Year	Engine	Liters	HP	System	Functions
2009/11 - 2012/11	CDLC	2.0	256	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> </ul> </li> </ul>

2009/11 - 2011/05	CDLA	2.0	265	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Golf VI [5K1] - Golf VI 2.5					
Year	Engine	Liters	HP	System	Functions
2009/06 -	CBTA	2.5	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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**VW Golf VI [5K1] - Golf VI 1.6 TDI 4Motion**

Year	Engine	Liters	HP	System	Functions
2008/12 - 2012/11	CAYC	1.6	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> </ul> <p>• <b>Actuators</b></p>

**VW Golf VI [5K1] - Golf VI 1.8 TSI**

Year	Engine	Liters	HP	System	Functions
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2009/06 - 2011/01	CDA	1.8	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
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VW					
Golf VI [5K1] - Golf VI 2.0 4Motion					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> </ul> </li> </ul>

2011/09 -	CRZA	2.0	260	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW Golf VI [AJ5] Variant - Golf VI 1.2 TSI Variant					
Year	Engine	Liters	HP	System	Functions
2009/08 -	CBZB	1.2	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> </ul>



					<ul style="list-style-type: none"> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2010/07 -	CBZA	1.2	86	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

VW Golf VI [AJ5] Variant - Golf VI 2.0 TDI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>

2009/07 -	CBDB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2009/07 - 2010/09	CBDA	2.0	136	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2010/01 -	CLCA	2.0	110	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> </ul>

2010/07 -	CFHB	2.0	136	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2010/09 -	CJAA	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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**VW Golf VI [AJ5] Variant - Golf VI 1.6 Variant**

Year	Engine	Liters	HP	System	Functions
2009/07 -	BSE	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> </ul> </li> </ul>

2010/07 -	CMXA	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW Golf VI [AJ5] Variant - Golf VI 1.4 Variant					
Year	Engine	Liters	HP	System	Functions
2009/07 -	BUD	1.4	80	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Golf VI [AJ5] Variant - Golf VI 1.4 TSI Variant					
Year	Engine	Liters	HP	System	Functions
2009/06 -	CAXA	1.4	122	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2009/07 -	CAVD	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> </ul> <p>• <b>Actuators</b></p>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> </ul> </li> </ul>



2012/07 -	CTHD	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Golf VI [AJ5] Variant - Golf VI 1.6 TDI Variant					
Year	Engine	Liters	HP	System	Functions
2009/07 -	CAYC	1.6	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2009/12 -	CAYB	1.6	90	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

VW					
Golf VI [AJ5] Variant - Golf VI 2.0 TSI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> </ul> </li> </ul>

2009/07 -	CCZA	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW Golf VI [AJ5] Variant - Golf VI 1.6 TDI Variant 4Motion					
Year	Engine	Liters	HP	System	Functions
2009/07 -	CAYC	1.6	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> </ul> </li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> </ul>

					<ul style="list-style-type: none"> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <ul style="list-style-type: none"> <li>• <b>Actuators</b></li> </ul>
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VW Golf VII [5G1] - Golf VII 1.2 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side</li> </ul> </li> <li>front           <ul style="list-style-type: none"> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> </ul> </li> <li>side           <ul style="list-style-type: none"> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side</li> </ul> </li> <li>front           <ul style="list-style-type: none"> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side</li> </ul> </li> <li>front           <ul style="list-style-type: none"> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> </ul> </li> <li>side           <ul style="list-style-type: none"> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>value               <ul style="list-style-type: none"> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> </ul> </li> </ul> </li> </ul>

2012/11  
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CJZA

1.2

105

Airbag  
Airbag AB 20 UDS

- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1

				<ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side 2</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> </ul> </li> </ul>

2012/08 -	CJZB	1.2	86	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front pass. side:Ohm value</li> <li>- Driver side front belt force limiter ign.circuit: Ohm value</li> <li>- Passenger side front belt force limiter ign.circuit: Ohm value</li> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> </ul>
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- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1: Ohm value
- Seat belt lock switch center 2 row
- 2nd row, driver side, buckle switch
- 2nd row, passenger side, buckle switch
- Ignition circuit, Battery disconnection
- 3rd row driver side buckle switch
- 3rd row passenger side buckle switch
- Seat occupied sensor fault status
- Ignition circuit 2, belt tensioner, front driver side



					<p>2</p> <ul style="list-style-type: none"> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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**VW Golf VII [5G1] - Golf VII 1.4 TSI**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> </ul> </li> </ul>

2012/08  
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CHPA

1.4

140

Airbag  
Airbag AB 20 UDS

- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3

				<ul style="list-style-type: none"> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side 2</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b></li> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> </ul>

2012/11  
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CMBA

1.4

122

Airbag  
Airbag AB 20 UDS

- Ignition circuit pretensioner front passenger side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status

- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1: Ohm value
- Seat belt lock switch center 2 row
- 2nd row, driver side, buckle switch
- 2nd row, passenger side, buckle switch
- Ignition circuit, Battery disconnection
- 3rd row driver side buckle switch
- 3rd row passenger side buckle switch
- Seat occupied sensor fault status
- Ignition circuit 2, belt tensioner, front driver side
- 2
- Ignition circuit 2, belt tensioner, front passenger side
- side
- **Actuators**

					<ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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**VW Golf VII [5G1] - Golf VII 1.4 TSI ACT**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front <ul style="list-style-type: none"> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> </ul> </li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front <ul style="list-style-type: none"> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> </ul> </li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side <ul style="list-style-type: none"> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> </ul> </li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance <ul style="list-style-type: none"> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm</li> </ul> </li> </ul> </li> </ul>

2012/08 -	CPTA	1.4	140	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front pass. side:Ohm value</li> <li>- Driver side front belt force limiter ign.circuit: Ohm value</li> <li>- Passenger side front belt force limiter ign.circuit: Ohm value</li> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> </ul>
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					<ul style="list-style-type: none"> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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VW					Golf VII [5G1] - Golf VII 1.6 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> </ul> </li> </ul>	



2012/08  
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CLHA

1.6

105

Airbag  
Airbag AB 20 UDS

- Ignition circuit pretensioner front passenger side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status

- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1: Ohm value
- Seat belt lock switch center 2 row
- 2nd row, driver side, buckle switch
- 2nd row, passenger side, buckle switch
- Ignition circuit, Battery disconnection
- 3rd row driver side buckle switch
- 3rd row passenger side buckle switch
- Seat occupied sensor fault status
- Ignition circuit 2, belt tensioner, front driver side
- 2
- Ignition circuit 2, belt tensioner, front passenger side
- side
- **Actuators**

				<ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front <ul style="list-style-type: none"> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> </ul> </li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front <ul style="list-style-type: none"> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> </ul> </li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side <ul style="list-style-type: none"> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> </ul> </li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance <ul style="list-style-type: none"> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> </ul> </li> </ul> </li> </ul>

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Airbag  
Airbag AB 20 UDS

- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value

					<ul style="list-style-type: none"> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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VW Golf VII [5G1] - Golf VII 1.6 TDI 4Motion					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> </ul> </li> </ul>

2012/11 -	CLHA	1.6	105	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front pass. side:Ohm value</li> <li>- Driver side front belt force limiter ign.circuit: Ohm value</li> <li>- Passenger side front belt force limiter ign.circuit: Ohm value</li> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm</li> </ul>
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value

- Driver side rollover protection trigger: Ohm

value

- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle

characteristic 1

- Left belt tensioner: tensioning cycle

characteristic 2

- Left belt tensioner: tensioning cycle

characteristic 3

- Left belt tensioner: tensioning cycle

characteristic 4

- Right belt tensioner: tensioning cycle

characteristic 1

- Right belt tensioner: tensioning cycle

characteristic 2

- Right belt tensioner: tensioning cycle

characteristic 3

- Right belt tensioner: tensioning cycle

characteristic 4

- Driving profile selection functional status

- Driving profile switching

- HV battery ignition circuit open circuit

- HV battery ignition circuit open circuit ohm value

- Passenger side airbag exhaust valve ignition

circuit

- Passenger side airbag exhaust valve ign.circuit

ohm value

- Status: Key-operated switch contact 1

- Status: Key-operated switch contact 2

- Driver side rear belt tensioner ignition circuit

- Passenger side rear belt tensioner ignition circuit

- Driver side pedestrian protection trigger ignition

circuit

- Passenger side pedestrian protection trigger

ignition circuit

- Driver side front airbag ignition circuit 1: Ohm

value

- Driver side seat position sensor status

- Passenger side front seat position sensor status

- Supply voltage status

- Rear driver side side airbag ignition circuit

- Rear passenger side side airbag ignition circuit

- Passenger side front airbag ignition circuit 1:

Ohm value

- Seat belt lock switch center 2 row

- 2nd row, driver side, buckle switch

- 2nd row, passenger side, buckle switch

- Ignition circuit, Battery disconnection

- 3rd row driver side buckle switch

- 3rd row passenger side buckle switch

- Seat occupied sensor fault status

- Ignition circuit 2, belt tensioner, front driver side

2

- Ignition circuit 2, belt tensioner, front passenger

side

• **Actuators**

- Failure lamp

- Collision signal

- Airbag indicator light OFF

- Activate component protection

					<ul style="list-style-type: none"> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> </ul> </li> </ul>



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Airbag  
Airbag AB 20 UDS

- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit

					<ul style="list-style-type: none"> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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VW Golf VII [5G1] - Golf VII 2.0 TDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> </ul> </li> </ul>

2012/11 -	CRBC	2.0	150	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front pass. side:Ohm value</li> <li>- Driver side front belt force limiter ign.circuit: Ohm value</li> <li>- Passenger side front belt force limiter ign.circuit: Ohm value</li> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> </ul>
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					<ul style="list-style-type: none"> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>2</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>2</li> <li><b>• Actuators</b></li> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
					<b>• Identification</b>

- **Clear errors**
  - **Error memory**
  - **Current values**
    - Data registration
    - Seat occupation detection
    - Power supply Clamp 15
    - Key switch position
    - Ignition circuit windowbag driver's side
    - Ignition circuit windowbag front passenger's side
    - Seat allocation detection front passenger side
- front
- Ignition circuit 1 Front airbag driver side
  - Ignition circuit 1 Front airbag front passenger side
- side
- Pass. side knee airbag, ign. circuit
  - Ignition circuit knee bag driver's side front
  - Ignition circuit side airbag driver side front
  - Ignition circuit side airbag front passenger side
- front
- Ignition circuit pretensioner driver side front
  - Ignition circuit pretensioner front passenger side
- front
- Seat belt lock switch driver seat front
  - Seat belt lock switch front passenger seat
  - Ignition circuit 2 Front airbag driver side
  - Ignition circuit 2 Front airbag front passenger side
- side
- Ignition circuit seat belt strength limiter front driver's side
  - Ignition circuit seat belt strength limiter front passenger's side
  - Driver side pedestrian protection ign.circuit resistance
  - Passenger side pedestrian protection ign.circuit resistance
  - Resistance key switch, contact 1
  - Resistance key switch, contact 2
  - Driver side front airbag ignition circuit 2: Ohm value
  - Passenger side front airbag ignition circuit 2: Ohm value
  - Driver side front side airbag ignition circuit: Ohm value
  - Passenger side front side airbag ignition circuit: Ohm value
  - Driver side rear side airbag ignition circuit: Ohm value
  - Passenger side rear side airbag ignition circuit: Ohm value
  - Driver side windowbag ignition circuit: Ohm value
  - Passenger side windowbag ignition circuit: Ohm value
  - Driver side front kneebag ignition circuit: Ohm value
  - Passenger side front kneebag ignition circuit: Ohm value
  - Driver side front belt tensioner ign.circuit: Ohm value
  - Passenger side front belt tensioner ign.circuit: Ohm value
  - Ignition circuit 2,belt tensioner,front driver side:Ohm value
  - Ignition circuit 2,belt tensioner,front pass. side:Ohm value
  - Driver side front belt force limiter ign.circuit: Ohm value
  - Passenger side front belt force limiter ign.circuit:

2012/08	CRBB	2.0	143	Airbag Airbag AB 20 UDS	<p>Ohm value</p> <ul style="list-style-type: none"> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> </ul> <p>Ohm value</p> <ul style="list-style-type: none"> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> </ul> <p>Current value</p> <ul style="list-style-type: none"> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> </ul> <p>value</p> <ul style="list-style-type: none"> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm</li> </ul>
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					<p>value</p> <ul style="list-style-type: none"> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1:</li> </ul> <p>Ohm value</p> <ul style="list-style-type: none"> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> </ul> <p>2</p> <ul style="list-style-type: none"> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> </ul> <p><b>• Actuators</b></p> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul>
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VW					Golf VII [5G1] - Golf VII 1.4 TSI MultiFuel	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Data registration</li> <li>- Seat occupation detection</li> <li>- Power supply Clamp 15</li> <li>- Key switch position</li> <li>- Ignition circuit windowbag driver's side</li> <li>- Ignition circuit windowbag front passenger's side</li> <li>- Seat allocation detection front passenger side front</li> <li>- Ignition circuit 1 Front airbag driver side</li> <li>- Ignition circuit 1 Front airbag front passenger side</li> <li>- Pass. side knee airbag, ign. circuit</li> <li>- Ignition circuit knee bag driver's side front</li> <li>- Ignition circuit side airbag driver side front</li> <li>- Ignition circuit side airbag front passenger side front</li> <li>- Ignition circuit pretensioner driver side front</li> <li>- Ignition circuit pretensioner front passenger side front</li> <li>- Seat belt lock switch driver seat front</li> <li>- Seat belt lock switch front passenger seat</li> <li>- Ignition circuit 2 Front airbag driver side</li> <li>- Ignition circuit 2 Front airbag front passenger side</li> <li>- Ignition circuit seat belt strength limiter front driver's side</li> <li>- Ignition circuit seat belt strength limiter front passenger's side</li> <li>- Driver side pedestrian protection ign.circuit resistance</li> </ul> </li> </ul>	

2012/11	CPVA	1.4	122	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> <li>- Passenger side pedestrian protection ign.circuit resistance</li> <li>- Resistance key switch, contact 1</li> <li>- Resistance key switch, contact 2</li> <li>- Driver side front airbag ignition circuit 2: Ohm value</li> <li>- Passenger side front airbag ignition circuit 2: Ohm value</li> <li>- Driver side front side airbag ignition circuit: Ohm value</li> <li>- Passenger side front side airbag ignition circuit: Ohm value</li> <li>- Driver side rear side airbag ignition circuit: Ohm value</li> <li>- Passenger side rear side airbag ignition circuit: Ohm value</li> <li>- Driver side windowbag ignition circuit: Ohm value</li> <li>- Passenger side windowbag ignition circuit: Ohm value</li> <li>- Driver side front kneebag ignition circuit: Ohm value</li> <li>- Passenger side front kneebag ignition circuit: Ohm value</li> <li>- Driver side front belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side front belt tensioner ign.circuit: Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front driver side:Ohm value</li> <li>- Ignition circuit 2,belt tensioner,front pass. side:Ohm value</li> <li>- Driver side front belt force limiter ign.circuit: Ohm value</li> <li>- Passenger side front belt force limiter ign.circuit: Ohm value</li> <li>- Driver side rear belt tensioner ign.circuit: Ohm value</li> <li>- Passenger side rear belt tensioner ign.circuit: Ohm value</li> <li>- Battery isolator ignition circuit: Ohm value</li> <li>- Driver side front seat position sensor: Current value</li> <li>- Passenger side front seat position sensor: Current value</li> <li>- Driver side 2nd row belt switch: Ohm value</li> <li>- Passenger side 2nd row belt switch: Ohm value</li> <li>- 2nd row center belt switch: Ohm value</li> <li>- Driver side 3rd row belt switch: Ohm value</li> <li>- Passenger side 3rd row belt switch: Ohm value</li> <li>- Driver side front buckle switch: Ohm value</li> <li>- Passenger side front buckle switch: Ohm value</li> <li>- Seat occupied sensor: Ohm value</li> <li>- Driving profile selection system status</li> <li>- Left belt tensioner fault status</li> <li>- Right belt tensioner fault status</li> <li>- Driver side rollover protection trigger</li> <li>- Passenger side rollover protection trigger</li> <li>- Passenger side rollover protection trigger: Ohm value</li> <li>- Driver side rollover protection trigger: Ohm value</li> <li>- Right belt tensioner: Terminal 15</li> <li>- Right belt tensioner: Power supply</li> <li>- Right belt tensioner: Current input</li> <li>- Left belt tensioner: Current input</li> <li>- Left belt tensioner: Terminal 15</li> <li>- Left belt tensioner: Power supply</li> </ul>
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					<ul style="list-style-type: none"> <li>- Left belt tensioner: Temperature</li> <li>- Right belt tensioner: Temperature</li> <li>- Left belt tensioner: tensioning cycle characteristic 1</li> <li>- Left belt tensioner: tensioning cycle characteristic 2</li> <li>- Left belt tensioner: tensioning cycle characteristic 3</li> <li>- Left belt tensioner: tensioning cycle characteristic 4</li> <li>- Right belt tensioner: tensioning cycle characteristic 1</li> <li>- Right belt tensioner: tensioning cycle characteristic 2</li> <li>- Right belt tensioner: tensioning cycle characteristic 3</li> <li>- Right belt tensioner: tensioning cycle characteristic 4</li> <li>- Driving profile selection functional status</li> <li>- Driving profile switching</li> <li>- HV battery ignition circuit open circuit</li> <li>- HV battery ignition circuit open circuit ohm value</li> <li>- Passenger side airbag exhaust valve ignition circuit</li> <li>- Passenger side airbag exhaust valve ign.circuit ohm value</li> <li>- Status: Key-operated switch contact 1</li> <li>- Status: Key-operated switch contact 2</li> <li>- Driver side rear belt tensioner ignition circuit</li> <li>- Passenger side rear belt tensioner ignition circuit</li> <li>- Driver side pedestrian protection trigger ignition circuit</li> <li>- Passenger side pedestrian protection trigger ignition circuit</li> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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VW					Golf VII [5G1] - Golf VII 2.0 TDI 4Motion	
Year	Engine	Liters	HP	System	Functions	

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
  - Data registration
  - Seat occupation detection
  - Power supply Clamp 15
  - Key switch position
  - Ignition circuit windowbag driver's side
  - Ignition circuit windowbag front passenger's side
  - Seat allocation detection front passenger side
- front
  - Ignition circuit 1 Front airbag driver side
  - Ignition circuit 1 Front airbag front passenger side
- side
  - Pass. side knee airbag, ign. circuit
  - Ignition circuit knee bag driver's side front
  - Ignition circuit side airbag driver side front
  - Ignition circuit side airbag front passenger side
- front
  - Ignition circuit pretensioner driver side front
  - Ignition circuit pretensioner front passenger side
- front
  - Seat belt lock switch driver seat front
  - Seat belt lock switch front passenger seat
  - Ignition circuit 2 Front airbag driver side
  - Ignition circuit 2 Front airbag front passenger side
- side
  - Ignition circuit seat belt strength limiter front driver's side
  - Ignition circuit seat belt strength limiter front passenger's side
  - Driver side pedestrian protection ign.circuit resistance
  - Passenger side pedestrian protection ign.circuit resistance
  - Resistance key switch, contact 1
  - Resistance key switch, contact 2
  - Driver side front airbag ignition circuit 2: Ohm value
  - Passenger side front airbag ignition circuit 2: Ohm value
  - Driver side front side airbag ignition circuit: Ohm value
  - Passenger side front side airbag ignition circuit: Ohm value
  - Driver side rear side airbag ignition circuit: Ohm value
  - Passenger side rear side airbag ignition circuit: Ohm value
  - Driver side windowbag ignition circuit: Ohm value
  - Passenger side windowbag ignition circuit: Ohm value
  - Driver side front kneebag ignition circuit: Ohm value
  - Passenger side front kneebag ignition circuit: Ohm value
  - Driver side front belt tensioner ign.circuit: Ohm value
  - Passenger side front belt tensioner ign.circuit: Ohm value
  - Ignition circuit 2,belt tensioner,front driver side:Ohm value
  - Ignition circuit 2,belt tensioner,front pass. side:Ohm value
  - Driver side front belt force limiter ign.circuit: Ohm value

2012/11  
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CRLB

2.0

150

Airbag  
Airbag AB 20 UDS

- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit

					<ul style="list-style-type: none"> <li>- Driver side front airbag ignition circuit 1: Ohm value</li> <li>- Driver side seat position sensor status</li> <li>- Passenger side front seat position sensor status</li> <li>- Supply voltage status</li> <li>- Rear driver side side airbag ignition circuit</li> <li>- Rear passenger side side airbag ignition circuit</li> <li>- Passenger side front airbag ignition circuit 1: Ohm value</li> <li>- Seat belt lock switch center 2 row</li> <li>- 2nd row, driver side, buckle switch</li> <li>- 2nd row, passenger side, buckle switch</li> <li>- Ignition circuit, Battery disconnection</li> <li>- 3rd row driver side buckle switch</li> <li>- 3rd row passenger side buckle switch</li> <li>- Seat occupied sensor fault status</li> <li>- Ignition circuit 2, belt tensioner, front driver side</li> <li>- Ignition circuit 2, belt tensioner, front passenger side</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Failure lamp</li> <li>- Collision signal</li> <li>- Airbag indicator light OFF</li> <li>- Activate component protection</li> <li>- Crash signal/all belt tensioners</li> <li>- Anti-roll bar triggering</li> <li>- Vehicle conditioning</li> </ul> </li> </ul>
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VW						Passat [357] CC - Passat 3.6 FSI CC 4Motion					
Year	Engine	Liters	HP	System	Functions						
2008/08 - 2012/05	BWS	3.6	299	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> </ul>						

					<ul style="list-style-type: none"> <li>module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2008/05 - 2010/11	BLV	3.6	280	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> </li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>

VW Passat [357] CC - Passat 1.8 TSI CC					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> </ul> </li> </ul>

2008/05 - 2010/05	BZB	1.8	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p><b>• Actuators</b></p>
2008/11 - 2012/05	CDAA	1.8	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li><b>• Identification</b></li> <li><b>• Clear errors</b></li> <li><b>• Error memory</b></li> <li><b>• Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> </ul>

					<ul style="list-style-type: none"> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2009/11 - 2012/01	CDAB	1.8	152	Cruise control ACC 3.1	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
					<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> </ul>

2008/11 - 2009/11	CGYA	1.8	152	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW Passat [357] CC - Passat 2.0 TDI CC					
Year	Engine	Liters	HP	System	Functions
2008/05 - 2010/11	CBAB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> </ul>



					<ul style="list-style-type: none"> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2008/08 - 2010/11	CBBB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> </ul>

2009/05 - 2010/11	CBAC	2.0	143	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> <li>• <b>Actuators</b></li> </ul>
2010/11 - 2012/05	CFFA	2.0	136	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> </ul>

					<ul style="list-style-type: none"> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <b>• Actuators</b>
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VW					
Passat [357] CC - Passat 2.0 TSI CC					
Year	Engine	Liters	HP	System	Functions
2008/05 - 2010/12	CAWB	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> system <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <b>• Actuators</b>

<p>2008/08 - 2012/01</p>	<p>CCTA</p>	<p>2.0</p>	<p>200</p>	<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> <li>module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> </ul>
<p>2008/05 - 2012/05</p>	<p>CBFA</p>	<p>2.0</p>	<p>200</p>	<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2009/11 - 2010/11	CCZA	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

2010/11 - 2012/05	CCZB	2.0	211	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
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VW Passat [357] CC - Passat 3.6 FSI CC					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> </ul> </li> </ul>

2008/05 - 2010/11	BLV	3.6	280	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Passat [357] CC - Passat 2.0 TDI CC 4Motion					
Year	Engine	Liters	HP	System	Functions
2009/11 - 2010/11	CBBB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2010/11 - 2012/05	CFFB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> </ul> </li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>

VW Passat [357] CC - Passat 1.4 TSI CC					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>



2011/01 - 2012/05	CKMA	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Passat [362] - Passat 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> </ul> </li> </ul>

Tire control system  
Tire pressure monitor 4.0

- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded

2010/08

CAXA

1.4

122

loaded

- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display

				<ul style="list-style-type: none"> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
			Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> <li>module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

- **Clear errors**
- **Adjustments / settings**
  - Tire pressure monitor individual specified pressure adjustment
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - CAN communication
  - Supply voltage term.30
  - Tire pressure monitoring status
  - Transportation mode
  - System status
  - Inflation pressure sensor 1 Temperature
  - Inflation pressure sensor 2 Temperature
  - Inflation pressure sensor 3 Temperature
  - Inflation pressure sensor 4 Temperature
  - Inflation pressure sensor 1 Sensor code
  - Inflation pressure sensor 2 Sensor code
  - Inflation pressure sensor 3 Sensor code
  - Inflation pressure sensor 4 Sensor code
  - Radio interference
  - Load status selected
  - Warning: Check front left tire pressure
  - Warning: Check front right tire pressure
  - Tire pressure sensor 1: Actual pressure
  - Tire pressure sensor 1: Specified pressure
  - Tire pressure sensor 1: Wheel position
  - Tire pressure sensor 2: Actual pressure
  - Tire pressure sensor 2: Specified pressure
  - Tire pressure sensor 2: Wheel position
  - Tire pressure sensor 3: Actual pressure
  - Tire pressure sensor 3: Specified pressure
  - Tire pressure sensor 3: Wheel position
  - Designation wheel set 1
  - Designation wheel set 2
  - Designation wheel set 3
  - Designation wheel set 4
  - Designation wheel set 5
  - Designation wheel set 6
  - Designation wheel set 7
  - Designation wheel set 8
  - Designation wheel set 9
  - Designation wheel set 10
  - Currently monitored wheel set
  - Designation of currently monitored wheel set
  - Warning: Front left tire flat
  - Warning: Front right tire flat
  - Warning: Rear left tire flat
  - Warning: Rear right tire flat
  - Designation wheel set 11
  - Vehicle speed CAN message
  - CAN message voltage terminal 30
  - Tire pressure sensor: Last actual temperature received
  - Tire pressure sensor: Last actual pressure received
  - Tire pressure monitor sensor: Last wheel position received
  - Tire pressure monitor sensor: Last sensor code received
  - Tire pressure sensor 4: Actual pressure
  - Tire pressure sensor 4: Specified pressure
  - Tire pressure sensor 4: Wheel position
  - Wheel set 1 specified pressure, front axle, partially loaded
  - Wheel set 1 specified pressure, front axle, fully loaded
  - Wheel set 1 specified pressure, rear axle,

2010/11	CKMA	1.4	160	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>partially loaded</li> <li>- Wheel set 1 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle,</li> </ul>
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	<ul style="list-style-type: none"> <li>partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> </ul>

			<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> </ul> </li> </ul>



Tire control system  
Tire pressure monitor 4.0

- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded

2012/11 -	CTHD	1.4	160	<p>loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> </ul>
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					<ul style="list-style-type: none"> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
			Cruise control ACC 3.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

VW					Passat [362] - Passat 1.4 TSI EcoFuel	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> </ul> </li> </ul>	

- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded

2010/09

CDGA

1.4

150

Tire control system  
Tire pressure monitor 4.0

- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded

	<ul style="list-style-type: none"> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> </ul>

					<ul style="list-style-type: none"> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Passat [362] - Passat 1.8 FSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> </ul> </li> </ul>

- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded

Tire control system  
Tire pressure monitor 4.0



- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature
- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> <li>module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
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VW					Passat [362] - Passat 2.0 TSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> </ul> </li> </ul>	

- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle,

2010/11 -	CCZB	2.0	211	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> </ul>
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	<ul style="list-style-type: none"> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Passat [362] - Passat 1.6 TDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> </ul> </li> </ul>

2010/08  
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CAYC

1.6

105

Tire control system  
Tire pressure monitor 4.0

- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle,

			<p>partially loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
			<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>



					<ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Passat [362] - Passat 2.0 TDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> </ul> </li> </ul>

- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded

2010/08	CFFB	2.0	140	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> </ul>
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	<ul style="list-style-type: none"> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> <li>• <b>Actuators</b></li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code received</li> <li>- Tire pressure sensor 4: Actual pressure</li> <li>- Tire pressure sensor 4: Specified pressure</li> </ul> </li> </ul>

2010/11 -	CLLA	2.0	170	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>- Tire pressure sensor 4: Wheel position</li> <li>- Wheel set 1 specified pressure, front axle, partially loaded</li> <li>- Wheel set 1 specified pressure, front axle, fully loaded</li> <li>- Wheel set 1 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 1 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully</li> </ul>
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	<p>loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear left tire speed</li> <li>- rear right tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> </ul> </li> </ul>

				<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> </ul> </li> </ul>



Tire control system  
Tire pressure monitor 4.0

- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle,

2012/12 -	CFGC	2.0	177	<ul style="list-style-type: none"> <li>partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified</li> </ul>
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					<p>pressure</p> <ul style="list-style-type: none"> <li>- Front right tire pressure sensor specified pressure</li> </ul> <p>pressure</p> <ul style="list-style-type: none"> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> </ul> <p>pressure</p> <ul style="list-style-type: none"> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
			Cruise control ACC 3.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> <li>module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

VW Passat [362] - Passat 2.0 TDI 4Motion					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> </ul>

• **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded

2010/08

CFFB

2.0

140

Tire control system  
Tire pressure monitor 4.0

- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded

	<ul style="list-style-type: none"> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> </ul> </li> </ul>

- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded

Tire control system  
Tire pressure monitor 4.0



- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature
- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

				<p>Cruise control ACC 3.1</p> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> <li>module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> </ul> </li> </ul>

- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle,

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CFGC

2.0

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Tire control system  
Tire pressure monitor 4.0

partially loaded  
- Wheel set 4 specified pressure, front axle, fully loaded  
- Wheel set 4 specified pressure, rear axle, partially loaded  
- Wheel set 4 specified pressure, rear axle, fully loaded  
- Wheel set 5 specified pressure, front axle, partially loaded  
- Wheel set 5 specified pressure, front axle, fully loaded  
- Wheel set 5 specified pressure, rear axle, partially loaded  
- Wheel set 5 specified pressure, rear axle, fully loaded  
- Wheel set 6 specified pressure, front axle, partially loaded  
- Wheel set 6 specified pressure, front axle, fully loaded  
- Wheel set 6 specified pressure, rear axle, partially loaded  
- Wheel set 6 specified pressure, rear axle, fully loaded  
- Wheel set 7 specified pressure, front axle, partially loaded  
- Wheel set 7 specified pressure, front axle, fully loaded  
- Wheel set 7 specified pressure, rear axle, partially loaded  
- Wheel set 7 specified pressure, rear axle, fully loaded  
- Wheel set 8 specified pressure, front axle, partially loaded  
- Wheel set 8 specified pressure, front axle, fully loaded  
- Wheel set 8 specified pressure, rear axle, partially loaded  
- Wheel set 8 specified pressure, rear axle, fully loaded  
- Wheel set 9 specified pressure, front axle, partially loaded  
- Wheel set 9 specified pressure, front axle, fully loaded  
- Wheel set 9 specified pressure, rear axle, partially loaded  
- Wheel set 9 specified pressure, rear axle, fully loaded  
- Wheel set 10 specified pressure, front axle, partially loaded  
- Wheel set 10 specified pressure, front axle, fully loaded  
- Wheel set 10 specified pressure, rear axle, partially loaded  
- Wheel set 10 specified pressure, rear axle, fully loaded  
- Wheel set 11 specified pressure, front axle, partially loaded  
- Wheel set 11 specified pressure, front axle, fully loaded  
- Wheel set 11 specified pressure, rear axle, partially loaded  
- Wheel set 11 specified pressure, rear axle, fully loaded  
- Warning: Check rear left tire pressure  
- Warning: Check rear right tire pressure  
- Warning: Front left tire pressure too low  
- Warning: Front right tire pressure too low  
- Warning: Rear left tire pressure too low

	<ul style="list-style-type: none"> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> </ul>

					<ul style="list-style-type: none"> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> <li>• <b>Actuators</b></li> </ul>
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**VW** **Passat [362] - Passat 3.6 V6 4Motion**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel</li> </ul> </li> </ul>

2011/01 -	BWS	3.6	299	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>position received</li> <li>- Tire pressure monitor sensor: Last sensor code received</li> <li>- Tire pressure sensor 4: Actual pressure</li> <li>- Tire pressure sensor 4: Specified pressure</li> <li>- Tire pressure sensor 4: Wheel position</li> <li>- Wheel set 1 specified pressure, front axle, partially loaded</li> <li>- Wheel set 1 specified pressure, front axle, fully loaded</li> <li>- Wheel set 1 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 1 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> </ul>
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	<ul style="list-style-type: none"> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>



					<ul style="list-style-type: none"> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Passat [362] - Passat 1.8 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> </ul> </li> </ul>

Tire control system  
Tire pressure monitor 4.0

- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded

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- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set

			<ul style="list-style-type: none"> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
		<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> <li>• <b>Actuators</b></li> </ul>

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code received</li> <li>- Tire pressure sensor 4: Actual pressure</li> </ul> </li> </ul>

2012/01

CDA

1.8

160

Tire control system  
Tire pressure monitor 4.0

- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded

	<ul style="list-style-type: none"> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> </li> </ul>

					<p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Passat [365] Alltrack - Passat 2.0 TDI Alltrack					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> </ul> </li> </ul>



Tire control system  
Tire pressure monitor 4.0

- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully

2012/01

CFFB

2.0

140

loaded

- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position

					<ul style="list-style-type: none"> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
			Cruise control ACC 3.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> <li>module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

VW					Passat [365] Alltrack - Passat 2.0 TDI Alltrack 4Motion	
Year	Engine	Liters	HP	System	Functions	

- **Identification**
- **Clear errors**
- **Adjustments / settings**
  - Tire pressure monitor individual specified pressure adjustment
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - CAN communication
  - Supply voltage term.30
  - Tire pressure monitoring status
  - Transportation mode
  - System status
  - Inflation pressure sensor 1 Temperature
  - Inflation pressure sensor 2 Temperature
  - Inflation pressure sensor 3 Temperature
  - Inflation pressure sensor 4 Temperature
  - Inflation pressure sensor 1 Sensor code
  - Inflation pressure sensor 2 Sensor code
  - Inflation pressure sensor 3 Sensor code
  - Inflation pressure sensor 4 Sensor code
  - Radio interference
  - Load status selected
  - Warning: Check front left tire pressure
  - Warning: Check front right tire pressure
  - Tire pressure sensor 1: Actual pressure
  - Tire pressure sensor 1: Specified pressure
  - Tire pressure sensor 1: Wheel position
  - Tire pressure sensor 2: Actual pressure
  - Tire pressure sensor 2: Specified pressure
  - Tire pressure sensor 2: Wheel position
  - Tire pressure sensor 3: Actual pressure
  - Tire pressure sensor 3: Specified pressure
  - Tire pressure sensor 3: Wheel position
  - Designation wheel set 1
  - Designation wheel set 2
  - Designation wheel set 3
  - Designation wheel set 4
  - Designation wheel set 5
  - Designation wheel set 6
  - Designation wheel set 7
  - Designation wheel set 8
  - Designation wheel set 9
  - Designation wheel set 10
  - Currently monitored wheel set
  - Designation of currently monitored wheel set
  - Warning: Front left tire flat
  - Warning: Front right tire flat
  - Warning: Rear left tire flat
  - Warning: Rear right tire flat
  - Designation wheel set 11
  - Vehicle speed CAN message
  - CAN message voltage terminal 30
  - Tire pressure sensor: Last actual temperature received
  - Tire pressure sensor: Last actual pressure received
  - Tire pressure monitor sensor: Last wheel position received
  - Tire pressure monitor sensor: Last sensor code received
  - Tire pressure sensor 4: Actual pressure
  - Tire pressure sensor 4: Specified pressure
  - Tire pressure sensor 4: Wheel position
  - Wheel set 1 specified pressure, front axle, partially loaded
  - Wheel set 1 specified pressure, front axle, fully loaded

2012/01

CFFB

2.0

140

Tire control system  
Tire pressure monitor 4.0

- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded

	<ul style="list-style-type: none"> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> </ul>

Cruise control  
ACC 3.1

- Cruise control/ACC stored speed
- Cruise control/ACC stored distance
- ACC sensor unit actual current, positive end
- ACC sensor unit actual current, negative end
- ACC sensor unit voltage, negative end
- ACC sensor unit voltage, positive end
- Radar object 1 distance
- Radar object 1 relative speed
- Radar object 1 angular position
- (Adaptive) cruise control switch
- Cruise control/ACC button SET
- ACC
- Control unit temperature
- Communication with instrument panel
- Communication with steering column switch.  
module
- Commun. with strng. wh. angle sensor
- Communication with el. parking brake
- Communication with gateway
- Communication with transmission control unit
- Cruise control/ACC button Cancel
- ACC lens heating
- Communication with ESP control unit
- ACC CU signal, specif. acceleration

• **Actuators**

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Tire pressure monitor individual specified pressure adjustment

• **Error memory**

• **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8

Tire control system  
Tire pressure monitor 4.0

- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded



2013/01 -	CFGC	2.0	177	<ul style="list-style-type: none"> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> </ul>
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					<p>pressure</p> <ul style="list-style-type: none"> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
			Cruise control ACC 3.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> <li>module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

VW						Passat [365] Alltrack - Passat 2.0 TSI Alltrack 4Motion					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> </ul> </li> </ul>					

- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded

2012/01 -	CCZB	2.0	211	Tire control system Tire pressure monitor 4.0	<p>loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> </ul>
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	<p>loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> </ul> <p>loaded</p> <ul style="list-style-type: none"> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> </ul>

					<ul style="list-style-type: none"> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Passat [365] Variant - Passat 1.4 TSI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> </ul> </li> </ul>

- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded

Tire control system  
Tire pressure monitor 4.0

- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature
- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication



				<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> <li>module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> </ul> </li> </ul>

- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded

2010/11	CKMA	1.4	160	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> </ul>
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			<ul style="list-style-type: none"> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
		<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> </ul>

- ACC CU signal, specif. acceleration

• **Actuators**

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Tire pressure monitor individual specified pressure adjustment

• **Error memory**

• **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position

2012/11	CTHD	1.4	160	<p>Tire control system Tire pressure monitor 4.0</p>	<ul style="list-style-type: none"> <li>- Wheel set 1 specified pressure, front axle, partially loaded</li> <li>- Wheel set 1 specified pressure, front axle, fully loaded</li> <li>- Wheel set 1 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 1 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> </ul>
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	<ul style="list-style-type: none"> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> </ul> </li> </ul>

				<p>Cruise control ACC 3.1</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW						Passat [365] Variant - Passat 1.4 TSI EcoFuel Variant					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> </ul> </li> </ul>					



Tire control system  
Tire pressure monitor 4.0

- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle,

2010/09 -	CDGA	1.4	150	<ul style="list-style-type: none"> <li>partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> </ul>
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					<ul style="list-style-type: none"> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
			Cruise control ACC 3.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

VW					Passat [365] Variant - Passat 1.6 TDI Variant	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>	

• **Adjustments / settings**

- Tire pressure monitor individual specified pressure adjustment

• **Error memory**

• **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded

2010/08  
-

CAYC

1.6

105

Tire control system  
Tire pressure monitor 4.0

- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded

	<ul style="list-style-type: none"> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> </ul> </li> </ul>

				<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Passat [365] Variant - Passat 1.8 FSI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> </ul> </li> </ul>

Tire control system  
Tire pressure monitor 4.0

- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully



2010/08 -	CDAA	1.8	160	<p>loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified</li> </ul>
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					<ul style="list-style-type: none"> <li>pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
			Cruise control ACC 3.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> <li>module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

VW					Passat [365] Variant - Passat 2.0 TDI Variant	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> </ul> </li> </ul>	

- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded

2010/08

CFFA

2.0

136

Tire control system  
Tire pressure monitor 4.0

- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded

	<ul style="list-style-type: none"> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> </ul>

				<ul style="list-style-type: none"> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> </ul> </li> </ul>

2012/12 -	CFGC	2.0	177	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code received</li> <li>- Tire pressure sensor 4: Actual pressure</li> <li>- Tire pressure sensor 4: Specified pressure</li> <li>- Tire pressure sensor 4: Wheel position</li> <li>- Wheel set 1 specified pressure, front axle, partially loaded</li> <li>- Wheel set 1 specified pressure, front axle, fully loaded</li> <li>- Wheel set 1 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 1 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> </ul>
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- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature
- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

• **Identification**



					<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> <li>module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
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VW Passat [365] Variant - Passat 2.0 TDI Variant 4Motion					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> </ul> </li> </ul>

- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded

2010/08	CFFB	2.0	140	Tire control system Tire pressure monitor 4.0	<p>loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> </ul>
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	<ul style="list-style-type: none"> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code received</li> </ul> </li> </ul>

				<p>Tire control system Tire pressure monitor 4.0</p>	<ul style="list-style-type: none"> <li>- Tire pressure sensor 4: Actual pressure</li> <li>- Tire pressure sensor 4: Specified pressure</li> <li>- Tire pressure sensor 4: Wheel position</li> <li>- Wheel set 1 specified pressure, front axle, partially loaded</li> <li>- Wheel set 1 specified pressure, front axle, fully loaded</li> <li>- Wheel set 1 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 1 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle,</li> </ul>
2012/12	CFGC	2.0	177		

	<ul style="list-style-type: none"> <li>partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> </ul> </li> </ul>

					<ul style="list-style-type: none"> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Passat [365] Variant - Passat 2.0 TSI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> </ul> </li> </ul>



Tire control system  
Tire pressure monitor 4.0

- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle,

2010/11  
-

CCZB

2.0

211

- partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status

				<ul style="list-style-type: none"> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
			Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> <li>module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code received</li> <li>- Tire pressure sensor 4: Actual pressure</li> <li>- Tire pressure sensor 4: Specified pressure</li> <li>- Tire pressure sensor 4: Wheel position</li> <li>- Wheel set 1 specified pressure, front axle, partially loaded</li> </ul> </li> </ul>

2011/01

BWS

3.6

299

Tire control system  
Tire pressure monitor 4.0

- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded

	<ul style="list-style-type: none"> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> </ul> </li> </ul>

				<p>Cruise control ACC 3.1</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Passat [365] Variant - Passat 1.8 TSI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> </ul> </li> </ul>

Tire control system  
Tire pressure monitor 4.0

- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded



2011/02

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CDAB

1.8

152

loaded

- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure

					<ul style="list-style-type: none"> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
			Cruise control ACC 3.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

VW					Passat [3C2] - Passat 2.0 TSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> </ul>	

2005/03 - 2005/11	AXX	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> <li>• <b>Actuators</b></li> </ul>
2005/08 - 2007/12	BPY	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> </ul>

					<ul style="list-style-type: none"> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2005/11 - 2008/02	BWA	2.0	200	Cruise control ACC 3.1	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
					<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> </ul>

2008/05 - 2010/07	CAWB	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> <li>• <b>Actuators</b></li> </ul>
2008/05 - 2010/11	CCTA	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> </ul>



2005/09 - 2010/07	AXZ	3.2	250	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
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VW					Passat [3C2] - Passat 1.9 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> </ul> </li> </ul>	

2005/03 - 2006/02	BKC	1.9	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p><b>• Actuators</b></p>
2005/03 - 2008/11	BLS	1.9	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li><b>• Identification</b></li> <li><b>• Clear errors</b></li> <li><b>• Error memory</b></li> <li><b>• Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> </ul>



					<ul style="list-style-type: none"> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p><b>• Actuators</b></p>
2006/02 - 2008/11	BXE	1.9	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li><b>• Identification</b></li> <li><b>• Clear errors</b></li> <li><b>• Error memory</b></li> <li><b>• Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> </ul> <p><b>• Actuators</b></p>

VW					
Passat [3C2] - Passat 2.0 TDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li><b>• Identification</b></li> <li><b>• Clear errors</b></li> <li><b>• Error memory</b></li> <li><b>• Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> </ul> </li> </ul>

2005/03 - 2008/06	BKP	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2005/08 - 2008/06	BUZ	2.0	163	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2005/06 - 2006/02	BVE	2.0	122	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> </ul> </li> </ul>

2006/03 - 2006/05	BMW	2.0	120	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2008/11 - 2010/11	CBAC	2.0	143	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2008/05 - 2010/07	CBBB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> </ul> <p>• <b>Actuators</b></p>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> </ul> </li> </ul>

2008/11 - 2010/07	CBDC	2.0	110	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2008/05 - 2009/11	CBAA	2.0	136	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> </ul>

					<ul style="list-style-type: none"> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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**VW Passat [3C2] - Passat 1.6 FSI**

Year	Engine	Liters	HP	System	Functions
2005/03 - 2008/06	BLF	1.6	115	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>

**VW Passat [3C2] - Passat 2.0 FSI**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> </ul> </li> </ul>

<p>2005/03 - 2005/11</p>	<p>BLR</p>	<p>2.0</p>	<p>150</p>	<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> <li>• <b>Actuators</b></li> </ul>
<p>2005/11 - 2010/07</p>	<p>BVY</p>	<p>2.0</p>	<p>150</p>	<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> </ul>



					<ul style="list-style-type: none"> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Passat [3C2] - Passat 2.0 FSI 4Motion					
Year	Engine	Liters	HP	System	Functions
2005/09 - 2005/11	BLX	2.0	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

2005/11 - 2010/07	BVX	2.0	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> <li>module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
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VW Passat [3C2] - Passat 1.6					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> </ul> </li> </ul>

2005/03 - 2010/07	BSE	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Passat [3C2] - Passat 2.0 TDI 4Motion					
Year	Engine	Liters	HP	System	Functions
2005/03 - 2008/06	BKP	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2008/05 - 2010/08	CBAB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> </ul> <p>• <b>Actuators</b></p>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> </ul> </li> </ul>

2009/05 - 2010/07	CBBB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Passat [3C2] - Passat 3.6 FSI 4Motion					
Year	Engine	Liters	HP	System	Functions
2005/09 - 2010/07	BLV	3.6	280	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> </ul>

					module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <b>• Actuators</b>
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VW Passat [3C2] - Passat 3.6 FSI					
Year	Engine	Liters	HP	System	Functions
2005/09 - 2010/07	BLV	3.6	280	Cruise control ACC 3.1	<b>• Identification</b> <b>• Clear errors</b> <b>• Error memory</b> <b>• Current values</b> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <b>• Actuators</b>

VW Passat [3C2] - Passat 3.6 FSI R36 4Motion					
Year	Engine	Liters	HP	System	Functions
					<b>• Identification</b> <b>• Clear errors</b>

2007/04 - 2010/07	BWS	3.6	299	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> <li>module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
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VW					
Passat [3C2] - Passat 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> </ul> </li> </ul>

2007/05 - 2010/07	CAXA	1.4	122	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Passat [3C2] - Passat 1.4 TSI EcoFuel					
Year	Engine	Liters	HP	System	Functions
2008/11 - 2010/07	CDGA	1.4	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> </ul>



					<ul style="list-style-type: none"> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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**VW** **Passat [3C2] - Passat 1.8 TSI**

Year	Engine	Liters	HP	System	Functions
2008/05 - 2010/07	BZB	1.8	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> </ul> </li> </ul>

2009/11 - 2010/07	CDAB	1.8	152	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2008/11 - 2010/05	CGYA	1.8	152	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul>

					module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <b>• Actuators</b>
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VW						Passat [3C2] - Passat 1.6 TDI
Year	Engine	Liters	HP	System	Functions	
2009/08 - 2010/07	CAYC	1.6	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> </ul> module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <b>• Actuators</b>	

VW						Passat [3C2] - Passat 1.8 FSI
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>	

2009/11 - 2010/07	CDA	1.8	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
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VW						Passat [3C5] Variant - Passat 2.0 TSI Variant					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> </ul> </li> </ul>					

2005/08 - 2005/11	AXX	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2005/11 - 2008/02	BWA	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> </ul>

					<ul style="list-style-type: none"> <li>- ACC CU signal, specif. acceleration</li> <li>• <b>Actuators</b></li> </ul>
2005/08 - 2007/12	BPY	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> </ul> </li> </ul>

2007/11 - 2010/11	CAWB	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2007/12 - 2010/11	CCTA	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul>

<p>2009/11 - 2010/11</p>	<p>CCZA</p>	<p>2.0</p>	<p>200</p>	<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> <li>• <b>Actuators</b></li> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> <li>module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
<p>2008/05 -</p>				<p>Cruise control</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> </ul> </li> </ul>



2010/11	CCTB	2.0	170	ACC 3.1	<ul style="list-style-type: none"> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Passat [3C5] Variant - Passat 3.2 FSI Variant 4Motion					
Year	Engine	Liters	HP	System	Functions
2005/11 - 2010/11	AXZ	3.2	250	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> </ul>

- ACC lens heating
- Communication with ESP control unit
- ACC CU signal, specif. acceleration
- **Actuators**

VW					
Passat [3C5] Variant - Passat 1.9 TDI Variant					
Year	Engine	Liters	HP	System	Functions
2005/08 - 2006/02	BKC	1.9	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> </li> </ul>

2005/08 - 2008/11	BLS	1.9	105	Cruise control ACC 3.1	<p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2006/02 - 2008/11	BXE	1.9	105	Cruise control ACC 3.1	<p>• <b>Identification</b></p> <p>• <b>Clear errors</b></p> <p>• <b>Error memory</b></p> <p>• <b>Current values</b></p> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Passat [3C5] Variant - Passat 2.0 TDI Variant					
Year	Engine	Liters	HP	System	Functions
2005/08 - 2008/06	BKP	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> </ul> </li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> </ul> </li> </ul>

2005/08 - 2006/02	BVE	2.0	122	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p><b>• Actuators</b></p>
2006/03 - 2006/05	BWV	2.0	120	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li><b>• Identification</b></li> <li><b>• Clear errors</b></li> <li><b>• Error memory</b></li> <li><b>• Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2008/01 - 2009/11	CBAA	2.0	136	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> </ul> <p>• <b>Actuators</b></p>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> </ul> </li> </ul>

2008/01 - 2010/11	CBAB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2008/11 - 2010/11	CBAC	2.0	143	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul>

					<ul style="list-style-type: none"> <li>module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> <li>• <b>Actuators</b></li> </ul>
2008/05 - 2010/11	CBBB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> <li>module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> <li>• <b>Actuators</b></li> </ul>

VW Passat [3C5] Variant - Passat 2.0 TDI Variant 4Motion					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> </ul>



2005/08 - 2008/06	BKP	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2008/05 - 2010/11	CBAB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> </ul>

					<ul style="list-style-type: none"> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2009/05 - 2010/11	CBBB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>

VW Passat [3C5] Variant - Passat 1.6 FSI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> </ul>

2005/08 - 2008/06	BLF	1.6	115	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> <li>module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
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VW Passat [3C5] Variant - Passat 2.0 FSI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> </ul> </li> </ul>

2005/08 - 2005/11	BLR	2.0	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2005/11 - 2010/11	BVY	2.0	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management</li> </ul> <p>system</p> <ul style="list-style-type: none"> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul>

• Actuators

VW					
Passat [3C5] Variant - Passat 1.6 Variant					
Year	Engine	Liters	HP	System	Functions
2005/08 - 2010/11	BSE	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• Actuators</li> </ul>

VW					
Passat [3C5] Variant - Passat 2.0 FSI Variant 4Motion					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• Identification</li> <li>• Clear errors</li> <li>• Error memory</li> <li>• Current values               <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> </ul> </li> </ul>

2005/11 - 2010/11	BVX	2.0	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2005/09 - 2005/11	BLX	2.0	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul>

					module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <b>• Actuators</b>
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VW Passat [3C5] Variant - Passat 3.6 FSI Variant					
Year	Engine	Liters	HP	System	Functions
2005/09 - 2010/11	BLV	3.6	280	Cruise control ACC 3.1	<b>• Identification</b> <b>• Clear errors</b> <b>• Error memory</b> <b>• Current values</b> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <b>• Actuators</b>

VW Passat [3C5] Variant - Passat 3.6 FSI Variant 4Motion					
Year	Engine	Liters	HP	System	Functions
					<b>• Identification</b> <b>• Clear errors</b>

2005/09 - 2010/11	BLV	3.6	280	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> <li>module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
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VW Passat [3C5] Variant - Passat 3.6 FSI R36 Variant 4Motion					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> </ul> </li> </ul>



2007/04 - 2010/11	BWS	3.6	299	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW Passat [3C5] Variant - Passat 1.4 TSI Variant					
Year	Engine	Liters	HP	System	Functions
2007/05 - 2010/11	CAXA	1.4	122	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> </ul>

					<ul style="list-style-type: none"> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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**VW Passat [3C5] Variant - Passat 1.8 TSI Variant**

Year	Engine	Liters	HP	System	Functions
2007/05 - 2010/11	BZB	1.8	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> </ul> </li> </ul>

2009/11 - 2010/11	CDAB	1.8	152	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> <p>module</p> <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
2008/11 - 2010/11	CGYA	1.8	152	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul>

					module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <b>• Actuators</b>
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VW Passat [3C5] Variant - Passat 1.4 TSI EcoFuel Variant					
Year	Engine	Liters	HP	System	Functions
2008/11 - 2010/11	CDGA	1.4	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rear right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch.</li> </ul> </li> </ul> module <ul style="list-style-type: none"> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <b>• Actuators</b>

VW Passat [3C5] Variant - Passat 1.6 TDI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> </ul>

2009/08 - 2010/11	CAYC	1.6	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> </li> <li>• <b>Actuators</b></li> </ul>
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VW					
Passat [3C5] Variant - Passat 1.8 FSI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Power supply</li> <li>- front left tire speed</li> <li>- front right tire speed</li> <li>- rare right tire speed</li> <li>- rear left tire speed</li> <li>- Cruise control</li> <li>- rotation angle sensor</li> <li>- Steering wheel rotation angle sensor</li> <li>- Communication with engine management system</li> <li>- Cruise control/ACC button, speed +</li> <li>- Cruise control/ACC button, speed -</li> <li>- Cruise control/ACC button RESUME</li> <li>- Cruise control/ACC button distance +</li> <li>- Cruise control/ACC button distance -</li> </ul> </li> </ul>

2009/11 - 2010/11	CDA	1.8	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> <li>- Cruise control/ACC stored speed</li> <li>- Cruise control/ACC stored distance</li> <li>- ACC sensor unit actual current, positive end</li> <li>- ACC sensor unit actual current, negative end</li> <li>- ACC sensor unit voltage, negative end</li> <li>- ACC sensor unit voltage, positive end</li> <li>- Radar object 1 distance</li> <li>- Radar object 1 relative speed</li> <li>- Radar object 1 angular position</li> <li>- (Adaptive) cruise control switch</li> <li>- Cruise control/ACC button SET</li> <li>- ACC</li> <li>- Control unit temperature</li> <li>- Communication with instrument panel</li> <li>- Communication with steering column switch. module</li> <li>- Commun. with strng. wh. angle sensor</li> <li>- Communication with el. parking brake</li> <li>- Communication with gateway</li> <li>- Communication with transmission control unit</li> <li>- Cruise control/ACC button Cancel</li> <li>- ACC lens heating</li> <li>- Communication with ESP control unit</li> <li>- ACC CU signal, specif. acceleration</li> </ul> <p>• <b>Actuators</b></p>
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VW					
Sharan [7N1] - Sharan 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> </ul> </li> </ul>

2010/05  
-  
2012/06

CAVA

1.4

150

Tire control system  
Tire pressure monitor 4.0

- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle,

- partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified



				<p>pressure</p> <ul style="list-style-type: none"> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> </ul> </li> </ul>

2011/10  
-  
2012/05

CNWB

1.4

150

Tire control system  
Tire pressure monitor 4.0

- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded

					<p>loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> </ul>

- **Error memory**

- **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle,

2012/05 -	CTHA	1.4	150	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle,</li> </ul>
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					<ul style="list-style-type: none"> <li>partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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VW						Sharan [7N1] - Sharan 2.0 TDI	
Year	Engine	Liters	HP	System	Functions		
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> </ul> </li> </ul>		

- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle,

2010/05 -	CFFA	2.0	136	Tire control system Tire pressure monitor 4.0	partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure
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				<ul style="list-style-type: none"> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> </ul> </li> </ul>

<p>2010/08 - 2013/01</p>	<p>CFGB</p>	<p>2.0</p>	<p>170</p>	<p>Tire control system Tire pressure monitor 4.0</p>	<ul style="list-style-type: none"> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code received</li> <li>- Tire pressure sensor 4: Actual pressure</li> <li>- Tire pressure sensor 4: Specified pressure</li> <li>- Tire pressure sensor 4: Wheel position</li> <li>- Wheel set 1 specified pressure, front axle, partially loaded</li> <li>- Wheel set 1 specified pressure, front axle, fully loaded</li> <li>- Wheel set 1 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 1 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> </ul>
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loaded

- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure

				<ul style="list-style-type: none"> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> </ul> </li> </ul>

2011/05  
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CFFE

2.0

116

Tire control system  
Tire pressure monitor 4.0

- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle,

					<ul style="list-style-type: none"> <li>partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> </ul>

- Tire pressure monitor individual specified pressure adjustment
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - CAN communication
  - Supply voltage term.30
  - Tire pressure monitoring status
  - Transportation mode
  - System status
  - Inflation pressure sensor 1 Temperature
  - Inflation pressure sensor 2 Temperature
  - Inflation pressure sensor 3 Temperature
  - Inflation pressure sensor 4 Temperature
  - Inflation pressure sensor 1 Sensor code
  - Inflation pressure sensor 2 Sensor code
  - Inflation pressure sensor 3 Sensor code
  - Inflation pressure sensor 4 Sensor code
  - Radio interference
  - Load status selected
  - Warning: Check front left tire pressure
  - Warning: Check front right tire pressure
  - Tire pressure sensor 1: Actual pressure
  - Tire pressure sensor 1: Specified pressure
  - Tire pressure sensor 1: Wheel position
  - Tire pressure sensor 2: Actual pressure
  - Tire pressure sensor 2: Specified pressure
  - Tire pressure sensor 2: Wheel position
  - Tire pressure sensor 3: Actual pressure
  - Tire pressure sensor 3: Specified pressure
  - Tire pressure sensor 3: Wheel position
  - Designation wheel set 1
  - Designation wheel set 2
  - Designation wheel set 3
  - Designation wheel set 4
  - Designation wheel set 5
  - Designation wheel set 6
  - Designation wheel set 7
  - Designation wheel set 8
  - Designation wheel set 9
  - Designation wheel set 10
  - Currently monitored wheel set
  - Designation of currently monitored wheel set
  - Warning: Front left tire flat
  - Warning: Front right tire flat
  - Warning: Rear left tire flat
  - Warning: Rear right tire flat
  - Designation wheel set 11
  - Vehicle speed CAN message
  - CAN message voltage terminal 30
  - Tire pressure sensor: Last actual temperature received
  - Tire pressure sensor: Last actual pressure received
  - Tire pressure monitor sensor: Last wheel position received
  - Tire pressure monitor sensor: Last sensor code received
  - Tire pressure sensor 4: Actual pressure
  - Tire pressure sensor 4: Specified pressure
  - Tire pressure sensor 4: Wheel position
  - Wheel set 1 specified pressure, front axle, partially loaded
  - Wheel set 1 specified pressure, front axle, fully loaded
  - Wheel set 1 specified pressure, rear axle, partially loaded
  - Wheel set 1 specified pressure, rear axle, fully

2013/01	CFGC	2.0	177	Tire control system Tire pressure monitor 4.0	<p>loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> </ul>
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					<p>loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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VW					Sharan [7N1] - Sharan 2.0 TDI 4Motion	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> </ul> </li> </ul>	

- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded

2010/05 - 2012/05	CFFA	2.0	136	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> <li>- Wheel set 7 specified pressure, front axle, fully loaded</li> <li>- Wheel set 7 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 7 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 8 specified pressure, front axle, partially loaded</li> <li>- Wheel set 8 specified pressure, front axle, fully loaded</li> <li>- Wheel set 8 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 8 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> </ul>
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				<ul style="list-style-type: none"> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> </ul> </li> </ul>

2011/05 -	CFFB	2.0	140	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code received</li> <li>- Tire pressure sensor 4: Actual pressure</li> <li>- Tire pressure sensor 4: Specified pressure</li> <li>- Tire pressure sensor 4: Wheel position</li> <li>- Wheel set 1 specified pressure, front axle, partially loaded</li> <li>- Wheel set 1 specified pressure, front axle, fully loaded</li> <li>- Wheel set 1 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 1 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> </ul>
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- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure

					<ul style="list-style-type: none"> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
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VW						Sharan [7N1] - Sharan 2.0 TSI					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> </ul> </li> </ul>					

2010/11 -	CCZA	2.0	200	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code received</li> <li>- Tire pressure sensor 4: Actual pressure</li> <li>- Tire pressure sensor 4: Specified pressure</li> <li>- Tire pressure sensor 4: Wheel position</li> <li>- Wheel set 1 specified pressure, front axle, partially loaded</li> <li>- Wheel set 1 specified pressure, front axle, fully loaded</li> <li>- Wheel set 1 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 1 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 2 specified pressure, front axle, partially loaded</li> <li>- Wheel set 2 specified pressure, front axle, fully loaded</li> <li>- Wheel set 2 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 2 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 3 specified pressure, front axle, partially loaded</li> <li>- Wheel set 3 specified pressure, front axle, fully loaded</li> <li>- Wheel set 3 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 3 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 4 specified pressure, front axle, partially loaded</li> <li>- Wheel set 4 specified pressure, front axle, fully loaded</li> <li>- Wheel set 4 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 4 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 5 specified pressure, front axle, partially loaded</li> <li>- Wheel set 5 specified pressure, front axle, fully loaded</li> <li>- Wheel set 5 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 5 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 6 specified pressure, front axle, partially loaded</li> <li>- Wheel set 6 specified pressure, front axle, fully loaded</li> <li>- Wheel set 6 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 6 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 7 specified pressure, front axle, partially loaded</li> </ul>
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- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature

- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

**VW Touareg [7P5] - Touareg 3.0 FSI Hybrid**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> </ul> </li> </ul>

Tire control system  
Tire pressure monitor 4.0

- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded

	<p>loaded</p> <ul style="list-style-type: none"> <li>- Wheel set 9 specified pressure, front axle, partially loaded</li> <li>- Wheel set 9 specified pressure, front axle, fully loaded</li> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> </ul> </li> </ul>

2010/03 -	CGEA	3.0	333	<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> <li>- All doors status</li> <li>- Ventilation solenoid valve</li> <li>- Central locking status</li> <li>- Installing position sensor front left</li> <li>- Installing position sensor front right</li> <li>- Installing position sensor rear left</li> <li>- Installing position sensor rear right</li> <li>- Longitudinal acceleration</li> <li>- System pressure</li> <li>- Power supply Clamp 15</li> <li>- Hatchback status</li> <li>- Ambient temperature</li> <li>- Brake pressure</li> <li>- Basic setting status</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve spec.current</li> <li>- Transportation mode</li> <li>- System status</li> <li>- System status</li> <li>- Power supply Clamp 30</li> </ul> </li> </ul>

- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right

- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration

					<ul style="list-style-type: none"> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
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VW					Touareg [7P5] - Touareg 3.0 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> </ul> </li> </ul>	



- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded

Tire control system  
Tire pressure monitor 4.0

loaded

- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low

				<ul style="list-style-type: none"> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>	
			<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>	
<p>2010/01 - 2011/05</p>	<p>CASA</p>	<p>3.0</p>	<p>239</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> </ul> </li> </ul>

- Activate/deactivate shipment mode

• **Special functions**

- Pressure reduction
- Pressure accumulator, preload pressure
- Pressure build-up
- Charge air suspension struts

• **Error memory**

• **Current values**

- Vehicle driving speed
- Engine revolution
- stop lights switch
- air tank pressure
- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value

Underbody/Steering  
Adaptive suspension system 4.0

- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations

- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve

				<ul style="list-style-type: none"> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> </ul> </li> </ul>

Tire control system  
Tire pressure monitor 4.0

- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded



- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature
- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

- Identification
- Clear errors

				<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
<p>2010/11 - 2011/05</p>	<p>CASD</p>	<p>3.0</p>	<p>204</p>		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> <li>- All doors status</li> <li>- Ventilation solenoid valve</li> <li>- Central locking status</li> <li>- Installing position sensor front left</li> <li>- Installing position sensor front right</li> <li>- Installing position sensor rear left</li> <li>- Installing position sensor rear right</li> <li>- Longitudinal acceleration</li> <li>- System pressure</li> <li>- Power supply Clamp 15</li> <li>- Hatchback status</li> <li>- Ambient temperature</li> <li>- Brake pressure</li> <li>- Basic setting status</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> </ul> </li> </ul>

- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation

Underbody/Steering  
Adaptive suspension system 4.0

- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative

				<ul style="list-style-type: none"> <li>- Act. MMI setting Jack mode</li> <li>- Act. MMI setting Suspension raising</li> <li>- Act. MMI setting Trailer mode</li> <li>- Specified normal level status</li> <li>- Front left body acceleration</li> <li>- Front right body acceleration</li> <li>- Rear body acceleration</li> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b></li> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Tire pressure monitor individual specified pressure adjustment</li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b></li> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> </ul>

- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded

Tire control system  
Tire pressure monitor 4.0

- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded

				<ul style="list-style-type: none"> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
		Cruise control ACC 4.1		<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
				<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> </ul> </li> </ul>



2011/05	CRCA	3.0	245
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- Adaptation of normal level
- Wheel alignment
- Activate/deactivate shipment mode
- **Special functions**
  - Pressure reduction
  - Pressure accumulator, preload pressure
  - Pressure build-up
  - Charge air suspension struts
- **Error memory**
- **Current values**
  - Vehicle driving speed
  - Engine revolution
  - stop lights switch
  - air tank pressure
  - switching valve 1
  - switching valve 2
  - Standard level adjustment
  - All doors status
  - Ventilation solenoid valve
  - Central locking status
  - Installing position sensor front left
  - Installing position sensor front right
  - Installing position sensor rear left
  - Installing position sensor rear right
  - Longitudinal acceleration
  - System pressure
  - Power supply Clamp 15
  - Hatchback status
  - Ambient temperature
  - Brake pressure
  - Basic setting status
  - Carriage acceleration sensor front left
  - Carriage acceleration sensor front right
  - Carriage acceleration sensor rear
  - Front left damper valve act. current
  - Front right damper valve act.current
  - Rear left damper valve act. current
  - Rear right damper valve spec.current
  - Transportation mode
  - System status
  - System status
  - Power supply Clamp 30
  - Diagnosis mode
  - Terminal 50 status
  - Audi Drive Select
  - Front left wheel housing edge body height
  - Front right wheel housing edge body height
  - Rear left wheel housing edge body height
  - Rear right wheel housing edge body height
  - Time stamp
  - Complete altitude calibration
  - Front left vehicle level sensor, PWM signal value
  - Front right vehicle level sensor, PWM signal value
  - Rear left vehicle level sensor, PWM signal value
  - Rear right vehicle level sensor, PWM signal value
  - Compressor ambient temperature
  - Extreme level detected
  - System pressure sensor power supply
  - Left vehicle level sensor power supply
  - Right vehicle level sensor power supply
  - Solenoid valve block power supply
  - Front left damper valve current
  - Front right damper valve current
  - Rear left damper valve current
  - Rear right damper valve current
  - Front left damper PWM signal value

Underbody/Steering  
Adaptive suspension system 4.0

- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control

- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
  - Button lights
  - Central pressure accum., pressure discharge
  - Centr. pressure accum., charging
  - Air suspension compressor relay
  - Front left air spring valve

					<ul style="list-style-type: none"> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
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VW Touareg [7P5] - Touareg 4.2 TDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> </ul> </li> </ul>

Tire control system  
Tire pressure monitor 4.0

- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded

- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure

				<ul style="list-style-type: none"> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
			Cruise control ACC 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
2010/01 -	CKDA	4.2	340	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> <li>- All doors status</li> <li>- Ventilation solenoid valve</li> <li>- Central locking status</li> <li>- Installing position sensor front left</li> <li>- Installing position sensor front right</li> <li>- Installing position sensor rear left</li> <li>- Installing position sensor rear right</li> <li>- Longitudinal acceleration</li> <li>- System pressure</li> <li>- Power supply Clamp 15</li> </ul> </li> </ul>

- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level



Underbody/Steering  
Adaptive suspension system 4.0

- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation

					<p>operations</p> <ul style="list-style-type: none"> <li>- No.of rear right additional volume valve actuation operations</li> <li>- Level control active controller</li> <li>- Level control, control requirement</li> <li>- Current lane recognition mode</li> <li>- Steering angle sensor: Direction positive/negative</li> <li>- Act. MMI setting Jack mode</li> <li>- Act. MMI setting Suspension raising</li> <li>- Act. MMI setting Trailer mode</li> <li>- Specified normal level status</li> <li>- Front left body acceleration</li> <li>- Front right body acceleration</li> <li>- Rear body acceleration</li> <li>- Transverse tilt</li> <li>- Dry-running operation function</li> <li>- Front right normal level deviation</li> <li>- Front left normal level deviation</li> <li>- Norm.level deviation, rear left</li> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> </ul> <p>• <b>Actuators</b></p> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
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VW					Touareg [7P5] - Touareg 4.2 FSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b></li> <li>- Tire pressure monitor individual specified</li> </ul>	

pressure adjustment

• **Error memory**

• **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded

Tire control system  
Tire pressure monitor 4.0

- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded

	<ul style="list-style-type: none"> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> </ul> </li> </ul>

2011/01 -	CGNA	4.2	360	<ul style="list-style-type: none"> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> <li>- All doors status</li> <li>- Ventilation solenoid valve</li> <li>- Central locking status</li> <li>- Installing position sensor front left</li> <li>- Installing position sensor front right</li> <li>- Installing position sensor rear left</li> <li>- Installing position sensor rear right</li> <li>- Longitudinal acceleration</li> <li>- System pressure</li> <li>- Power supply Clamp 15</li> <li>- Hatchback status</li> <li>- Ambient temperature</li> <li>- Brake pressure</li> <li>- Basic setting status</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve spec.current</li> <li>- Transportation mode</li> <li>- System status</li> <li>- System status</li> <li>- Power supply Clamp 30</li> <li>- Diagnosis mode</li> <li>- Terminal 50 status</li> <li>- Audi Drive Select</li> <li>- Front left wheel housing edge body height</li> <li>- Front right wheel housing edge body height</li> <li>- Rear left wheel housing edge body height</li> <li>- Rear right wheel housing edge body height</li> <li>- Time stamp</li> <li>- Complete altitude calibration</li> <li>- Front left vehicle level sensor, PWM signal value</li> <li>- Front right vehicle level sensor, PWM signal value</li> </ul> </li> </ul> <p>value</p>
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Underbody/Steering  
Adaptive suspension system 4.0

- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour

- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left



					<ul style="list-style-type: none"> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
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VW					
Touareg [7P5] - Touareg 3.6 FSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> </ul> </li> </ul>

Tire control system  
Tire pressure monitor 4.0

- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded

loaded

- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position

				<ul style="list-style-type: none"> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
			Cruise control ACC 4.1	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> </ul> </li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
2010/04 -	CGRA	3.6	280	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> </ul> </li> </ul>

- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal

Underbody/Steering  
Adaptive suspension system 4.0

- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations

actuation operations

- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program

• **Actuators**

- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current, Hard
- Front right damper adjustment valve current, Soft
- Front right damper adjustment valve current, Hard
- Rear left damper adjustment valve current, Soft
- Rear left damper adjustment valve current, Hard
- Rear right damper adjustment valve current,

					<p>Soft</p> <ul style="list-style-type: none"> <li>- Rear right damper adjustment valve current, Hard</li> </ul>
					<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Tire pressure monitor individual specified pressure adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- CAN communication</li> <li>- Supply voltage term.30</li> <li>- Tire pressure monitoring status</li> <li>- Transportation mode</li> <li>- System status</li> <li>- Inflation pressure sensor 1 Temperature</li> <li>- Inflation pressure sensor 2 Temperature</li> <li>- Inflation pressure sensor 3 Temperature</li> <li>- Inflation pressure sensor 4 Temperature</li> <li>- Inflation pressure sensor 1 Sensor code</li> <li>- Inflation pressure sensor 2 Sensor code</li> <li>- Inflation pressure sensor 3 Sensor code</li> <li>- Inflation pressure sensor 4 Sensor code</li> <li>- Radio interference</li> <li>- Load status selected</li> <li>- Warning: Check front left tire pressure</li> <li>- Warning: Check front right tire pressure</li> <li>- Tire pressure sensor 1: Actual pressure</li> <li>- Tire pressure sensor 1: Specified pressure</li> <li>- Tire pressure sensor 1: Wheel position</li> <li>- Tire pressure sensor 2: Actual pressure</li> <li>- Tire pressure sensor 2: Specified pressure</li> <li>- Tire pressure sensor 2: Wheel position</li> <li>- Tire pressure sensor 3: Actual pressure</li> <li>- Tire pressure sensor 3: Specified pressure</li> <li>- Tire pressure sensor 3: Wheel position</li> <li>- Designation wheel set 1</li> <li>- Designation wheel set 2</li> <li>- Designation wheel set 3</li> <li>- Designation wheel set 4</li> <li>- Designation wheel set 5</li> <li>- Designation wheel set 6</li> <li>- Designation wheel set 7</li> <li>- Designation wheel set 8</li> <li>- Designation wheel set 9</li> <li>- Designation wheel set 10</li> <li>- Currently monitored wheel set</li> <li>- Designation of currently monitored wheel set</li> <li>- Warning: Front left tire flat</li> <li>- Warning: Front right tire flat</li> <li>- Warning: Rear left tire flat</li> <li>- Warning: Rear right tire flat</li> <li>- Designation wheel set 11</li> <li>- Vehicle speed CAN message</li> <li>- CAN message voltage terminal 30</li> <li>- Tire pressure sensor: Last actual temperature received</li> <li>- Tire pressure sensor: Last actual pressure received</li> <li>- Tire pressure monitor sensor: Last wheel position received</li> <li>- Tire pressure monitor sensor: Last sensor code received</li> <li>- Tire pressure sensor 4: Actual pressure</li> <li>- Tire pressure sensor 4: Specified pressure</li> <li>- Tire pressure sensor 4: Wheel position</li> </ul> </li> </ul>



Tire control system  
Tire pressure monitor 4.0

- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded

	<ul style="list-style-type: none"> <li>- Wheel set 9 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 9 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 10 specified pressure, front axle, partially loaded</li> <li>- Wheel set 10 specified pressure, front axle, fully loaded</li> <li>- Wheel set 10 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 10 specified pressure, rear axle, fully loaded</li> <li>- Wheel set 11 specified pressure, front axle, partially loaded</li> <li>- Wheel set 11 specified pressure, front axle, fully loaded</li> <li>- Wheel set 11 specified pressure, rear axle, partially loaded</li> <li>- Wheel set 11 specified pressure, rear axle, fully loaded</li> <li>- Warning: Check rear left tire pressure</li> <li>- Warning: Check rear right tire pressure</li> <li>- Warning: Front left tire pressure too low</li> <li>- Warning: Front right tire pressure too low</li> <li>- Warning: Rear left tire pressure too low</li> <li>- Warning: Rear right tire pressure too low</li> <li>- Specified pressure rear axle, currently monitored wheel set</li> <li>- Specified pressure front axle, currently monitored wheel set</li> <li>- Tire pressure display</li> <li>- Tire pressure monitoring display</li> <li>- Terminal 30B status</li> <li>- MODE button status</li> <li>- Stratification flap specified position</li> <li>- ALL button</li> <li>- Front left tire pressure sensor actual pressure</li> <li>- Front right tire pressure sensor actual pressure</li> <li>- Rear left tire pressure sensor actual pressure</li> <li>- Rear right tire pressure sensor actual pressure</li> <li>- Front left tire pressure sensor specified pressure</li> <li>- Front right tire pressure sensor specified pressure</li> <li>- Rear left tire pressure sensor specified pressure</li> <li>- Rear right tire pressure sensor specified pressure</li> <li>- Front left tire pressure sensor temperature</li> <li>- Front right tire pressure sensor temperature</li> <li>- Rear left tire pressure sensor temperature</li> <li>- Rear right tire pressure sensor temperature</li> <li>- Tire puncture indication</li> </ul>
Cruise control	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- ACC sensor adjustment</li> <li>- Basic adjustment</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Calculated vehicle speed</li> <li>- Power supply Clamp 15</li> <li>- Software version</li> <li>- Vertical angle deviation</li> <li>- Horizontal angle deviation</li> <li>- Radar beam 1 intensity</li> </ul> </li> </ul>

			ACC 4.1	<ul style="list-style-type: none"> <li>- Radar beam 2 intensity</li> <li>- Radar beam 3 intensity</li> <li>- Radar beam 4 intensity</li> <li>- Radar status</li> <li>- Misalignment angle</li> <li>- ACC lens heating actuation signal</li> <li>- Radar beam 1 and 2 medium intensity</li> <li>- Misalignment angle 2</li> <li>- Control unit temperature</li> <li>- System identification</li> <li>- Calculated vehicle acceleration</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Lens heating actuation</li> <li>- ACC lens adjustment</li> </ul> </li> </ul>
2010/08 -	CMTA	3.6	249	<ul style="list-style-type: none"> <li>• <b>Identification</b></li> <li>• <b>Clear errors</b></li> <li>• <b>Adjustments / settings</b> <ul style="list-style-type: none"> <li>- Transfer configuration</li> <li>- Adjustment of vehicle level sensors</li> <li>- Activate air suspension</li> <li>- Adaptation of normal level</li> <li>- Wheel alignment</li> <li>- Activate/deactivate shipment mode</li> </ul> </li> <li>• <b>Special functions</b> <ul style="list-style-type: none"> <li>- Pressure reduction</li> <li>- Pressure accumulator, preload pressure</li> <li>- Pressure build-up</li> <li>- Charge air suspension struts</li> </ul> </li> <li>• <b>Error memory</b></li> <li>• <b>Current values</b> <ul style="list-style-type: none"> <li>- Vehicle driving speed</li> <li>- Engine revolution</li> <li>- stop lights switch</li> <li>- air tank pressure</li> <li>- switching valve 1</li> <li>- switching valve 2</li> <li>- Standard level adjustment</li> <li>- All doors status</li> <li>- Ventilation solenoid valve</li> <li>- Central locking status</li> <li>- Installing position sensor front left</li> <li>- Installing position sensor front right</li> <li>- Installing position sensor rear left</li> <li>- Installing position sensor rear right</li> <li>- Longitudinal acceleration</li> <li>- System pressure</li> <li>- Power supply Clamp 15</li> <li>- Hatchback status</li> <li>- Ambient temperature</li> <li>- Brake pressure</li> <li>- Basic setting status</li> <li>- Carriage acceleration sensor front left</li> <li>- Carriage acceleration sensor front right</li> <li>- Carriage acceleration sensor rear</li> <li>- Front left damper valve act. current</li> <li>- Front right damper valve act.current</li> <li>- Rear left damper valve act. current</li> <li>- Rear right damper valve spec.current</li> <li>- Transportation mode</li> <li>- System status</li> <li>- System status</li> <li>- Power supply Clamp 30</li> <li>- Diagnosis mode</li> <li>- Terminal 50 status</li> <li>- Audi Drive Select</li> <li>- Front left wheel housing edge body height</li> <li>- Front right wheel housing edge body height</li> </ul> </li> </ul>

Underbody/Steering  
Adaptive suspension system 4.0

- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle

- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left

					<ul style="list-style-type: none"> <li>- Norm.level deviation, rear right</li> <li>- Calculated compressor temperature</li> <li>- Compressor temperature</li> <li>- Compressor relay</li> <li>- Air release valve</li> <li>- Pressure accumulator valve</li> <li>- Level valve front left</li> <li>- Level valve front right</li> <li>- Level valve rear left</li> <li>- Level valve rear right</li> <li>- Metered air quantity</li> <li>- Air suspension compressor</li> <li>- Level control status</li> <li>- Shipment mode</li> <li>- Current drive program</li> <li>• <b>Actuators</b> <ul style="list-style-type: none"> <li>- Button lights</li> <li>- Central pressure accum., pressure discharge</li> <li>- Centr. pressure accum., charging</li> <li>- Air suspension compressor relay</li> <li>- Front left air spring valve</li> <li>- Front right air spring valve</li> <li>- Rear left air spring valve</li> <li>- Rear right air spring valve</li> <li>- Damper adjustment valve current</li> <li>- Front left damper adjustment valve current, Soft</li> <li>- Front left damper adjustment valve current, Hard</li> <li>- Front right damper adjustment valve current, Soft</li> <li>- Front right damper adjustment valve current, Hard</li> <li>- Rear left damper adjustment valve current, Soft</li> <li>- Rear left damper adjustment valve current, Hard</li> <li>- Rear right damper adjustment valve current, Soft</li> <li>- Rear right damper adjustment valve current, Hard</li> </ul> </li> </ul>
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